United Nations Development Programme
Country: Montenegro
PROJECT DOCUMENT[1]

Project Title: Towards Carbon Neutral Tourism in Montenegro

UNDAF Outcome(s): Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded.
Expected CPAP Output(s): Balanced and equitable regional economic growth based on sustainable planning and use of natural resources that will provide a high quality of life and long-term economic opportunities for its inhabitants. Related UNDP Strategic Plan focus area: Energy and environment for sustainable development; Crisis prevention and recovery.
Executing Entity / Implementing Partner: United Nations Development Programme
Implementing Entity/Responsible Partners: Ministry of Sustainable Development and Tourism

Brief Description

The project will adopt a comprehensive approach to minimizing the carbon footprint of Montenegro's main and most dynamic economic sector, the tourism sector with the immediate target to maintain tourist sector related GHG emissions in Montenegro at the 2013 level or lower despite the rapidly growing number of visitors. It will do so by promoting country's transition towards a carbon neutral travel & tourism by facilitating development of supporting low-carbon policies and helping the tourism industry to identify and implement cost-effective mitigation options in travel and accommodation sectors, including minimizing the energy use and transport in and around new green field development projects. It also seeks to introduce carbon offset schemes and other innovative financial mechanisms, including the establishment of a National Tourism Climate Fund, to compensate for the residual emissions and generate additional revenues for financing climate mitigation and adaptation actions in tourism.

Programme Period:	2014-2018
Atlas Award ID:	00079785
Project ID:	00089673
PIMS #	5149
Start date:	Sep 1, 2014
End Date	Aug 31, 2019
Management Arrangements	DIM
PAC Meeting Date	_____

Total resources required:	US$ 124,997,362
Total allocated resources:	US$ 124,997,362
Regular UNDP (TRAC)	US$ 1,657,500
Other:	
GEF	US$ 3,090,000
Other Cash	US$ 118,437,862
In-kind	US$ 1,812,000

Agreed by Ministry for Sustainable Development and Tourism:

NAME SIGNATURE Date/Month/Year

Agreed by (UNDP) (Executing Entity/Implementing Partner):

NAME SIGNATURE Date/Month/Year

[1]For UNDP supported GEF-funded projects, as this includes GEF-specific requirements

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LIST OF ACRONYMS

ADC	Austrian Development Co-operation
UNDP CO	UNDP Country Office
CO_2	Carbon dioxide
CSD	Montenegro Center for Sustainable Development
EBRD	European Bank for Reconstruction and Development
EDS	Draft Energy Development Strategy of Montenegro by 2030
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency of Montenegro
EU	European Union
EUR	Euros
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GWh	Gigawatthour
HQ	UNDP Headquarters
IEA	International Energy Agency
ICT	Information and Communication Technology
ISO	International Organisation for Standardization
ISO 14000	ISO standards and certification system for environmental management
LEED	Leadership in Energy and Environmental Design (A US based certification scheme)
M&E	Monitoring and Evaluation
MSDT	Ministry of Sustainable Development and Tourism
MoE	Ministry of Economy
MoF	Ministry of Finance
MoT	Ministry of Transport, Maritime Affairs and Communications
MONSTAT	Statistical Office of Montenegro
MRV	Monitoring, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Action
NGO	Non-Governmental Organization
NSICM	National Strategy for Integrated Coastal Management
NTCF	National Tourism Climate Fund
NTO	National Tourism Organization
O&M	Operation & Maintenance
PB	Project Board
PIR	Project Implementation Review
PMU	Project Management Unit
PPG	Project Preparation Grant
PPP	Purchasing Power Parity
PSC	Project Steering Committee
PV	Photovoltaic
QPR	Quarterly Progress Report
RCU	UNDP Regional Coordination Unit
RE	Renewable Energy
RTA	Regional Technical Advisor
SWH	Solar water heater
TPR	Tripartite Review
TrDS	Transport Development Strategy of Montenegro
TTR	Terminal Tripartite Review
TuDS	Montenegro Tourism Development Strategy to 2020
WB	World Bank

UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	United Nations World Tourism Organization
WTTC	World Travel and Tourism Council
ŽPCG	Railway Transport of Montenegro

1. SITUATION ANALYSIS

1.1. Context and global significance

1. Montenegro is a small country at the Adriatic Sea with a population of 620,000 people and covering a surface area of 13.8 thousand km^2 only. Yet, it boasts some of the most spectacular scenery in the world and unparalleled richness and diversity of natural and cultural resources. Montenegro's prime touristic attractions include 300 kilometres of stunning coastline with 60 kilometres of beaches, historical and cultural monuments, mountain ranges, virgin forests and national parks. Because of this and the favourable political and economic climate, Montenegro has experienced rapid increase in the number of visitors and amount of investments in the tourism sector. In 2012, more than 1.4 million tourists visited Montenegro, more than twice the domestic population and ten times more than just a decade ago.

2. Travel and Tourism's total contribution to the GDP of Montenegro reached 19,5 % (EUR 663,8 million) in 2012 and is projected to increase to 34,4% (EUR 1 723,6 million) in 2023. The investment in the sector amounted to EUR 173,4 million corresponding to 24,6% of total capital investment and with a projected growth to EUR 518,7 million (49,6% of total) in 2023. By that time, the tourism sector should also be supporting as many as 59,000 jobs i.e. over 30 % of all jobs in Montenegro.[2]

3. By looking at the projected longer term relative growth rates of travel and tourism sector for 2013-2023, Montenegro has remained among the top three countries globally for sector's total contribution to the GDP, capital investment and job creation.

Table 1.1: % Annual growth rate of Travel &Tourism's contribution to GDP[3]

Fastest growing In which countries will the total contribution of Travel & Tourism to GDP grow fastest from 2013-2023?		10-yr Real Growth
Total GDP		annualised, %
1	China	8.9
2	Montenegro	8.6
3	India	7.9
4	Namibia	7.9
5	Zambia	7.8
6	Gabon	7.4
7	Cambodia	7.2
8	Cape Verde	7.1
9	Angola	6.9
10	Sierra Leone	6.9

Table 1.2: Annual growth rate of investments[3]

Fastest growing In which countries will capital investment in Travel & Tourism Capital Investment grow fastest between 2013 and 2023?		10-yr Real Growth
Capital Investment		annualised, %
1	Montenegro	10.0
2	China	9.2
3	Zambia	9.0
4	Thailand	8.1
5	Gambia	8.0
6	Cape Verde	7.9
7	Macau	7.8
8	Pakistan	7.8
9	Brazil	7.8
10	Iraq	7.6

4. As a main driver of Montenegro's economic growth and investment, the tourism sector is responsible directly and indirectly for a large share of GHG emissions from the transport, accommodation and other tourism-related activities. In the business-as-usual scenario of the Initial National Communication of Montenegro, its GHG emissions have been projected to rise by 40% in 2020 above the 1990 baseline.

5. By contributing to over third of the GDP and a half of the capital investment in infrastructure, the tourism sector will inevitably be an important, if not the leading factor in the projected GHG emissions growth. According to the projections of the WTTC[4] the international tourist arrivals will grow from 1,3

[2]http://www.wttc.org/research/economic-impact-research/country-reports/m/montenegro/

[3]http://www.wttc.org/research/economic-impact-research/league-table-summary/

[4]http://www.wttc.org/research/economic-impact-research/country-reports/m/montenegro/

million in 2012 (excluding cruise visitors) to close to 3 million in 2023. The following aspects in this regard are specifically to be noted:

- two-fold increase in the tourist accommodation capacity from the current 70,000 rooms up to 140,000 rooms would lead to additional power demand of about 125 GWh/year or 42 $ktCO_2$;
- tourism industry is known to generate disproportionately more amount of waste than residential or other sectors due to the nature of final consumption: tourism-related waste accounted for 10% of the total waste volume in 2011 and its share would double by 2020;
- two-fold increase in the number of tourists would bring to Montenegrin roads about half a million additional cars[5] during the summer season (compared to the total of 200,000 vehicles currently registered in Montenegro) as well as an additional 1-2 million tourists flying in with correspondingly high carbon footprint;
- Cruise shipping has grown more than 10% per annum over the past decade and this growth is likely to continue resulting in additional GHG emissions.

6. Apart from direct GHG emissions, the indirect climate change impact of millions of holiday-makers is substantial. First, because of their sheer numbers in proportion to small local population and, secondly, because of their more carbon intensive life-style, travel and consumption patterns.

1.2. Key characteristics of the tourism in Montenegro

7. Montenegro is still primarily a "sun and sea" holiday destination, although efforts are made to extend the season and the tourism offer also to mountain areas. The biggest growth during the recent years has taken place in the coastal cities, particularly in Budva, in which new hotels and private accommodation facilities have mushroomed in a largely unplanned manner. In other coastal cities, the speed of new construction has been slower, but the development of new large luxury resorts has already started also around the Kotor Bay area such as Porto Montenegro and Lustica in Tivat. The development of the former military base Kumbor (close to Herceg Novi) is about to start. At the southern coast, investors for the development of the Velika Plaza and Ada Bojana areas are still to be selected. [6]

Figure 1.1 Map of the coastal area of Montenegro (Source: http://www.un.org)

[5] estimated on the basis of the observed seasonal variation, as registered by the traffic counters in Radanovići on the main coastal road between Tivat/Kotor and Budva

[6] http://www.montenegroinvestments.info

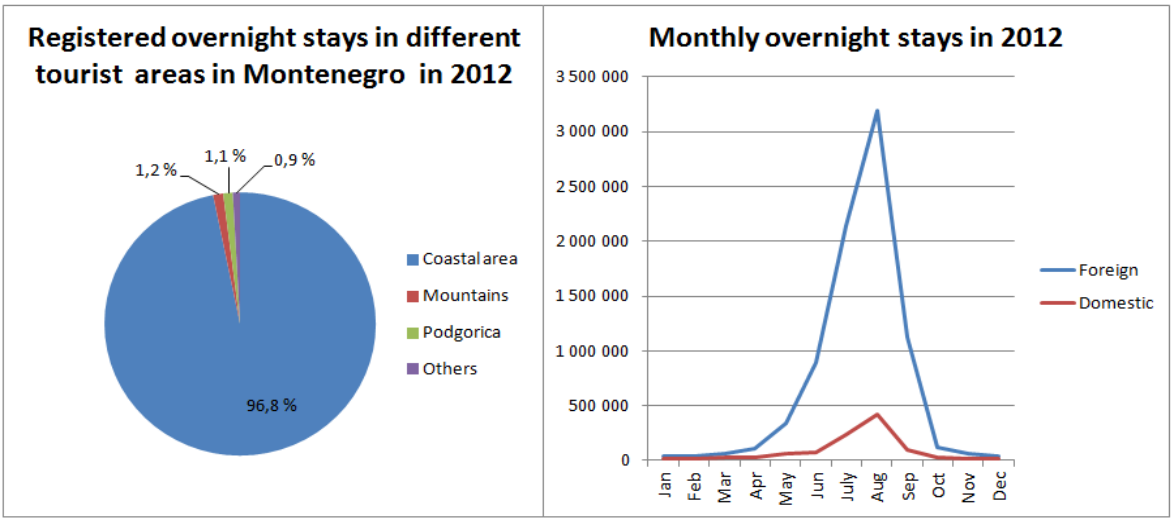


Figure 1.2 Share of registered annual overnight stays in different geographical areas of Montenegro and the seasonal variation of all overnight stays in 2012 (Source: MONSTAT 2012)

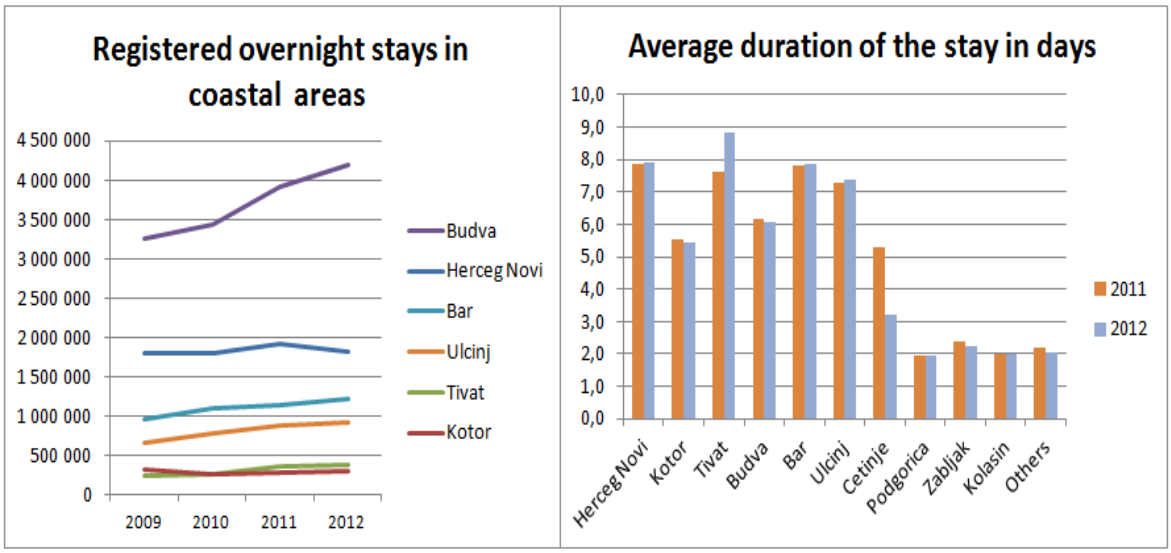
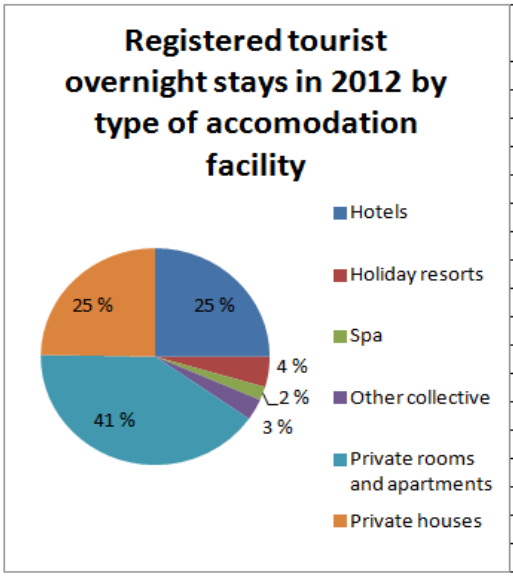


Figure 1.3 Registered overnight stays in selected municipalities of the coastal area and the average duration of the stay for both coastal and other tourist areas[7] (Source: MONSTAT 2012)

8. For accommodation, non-collective accommodation i.e. private rooms, apartments and houses are the preferred choice by the majority of visitors. While the official statistics indicate a market share of 66% of private accommodation vs. hotels and other collective tourist accommodation, in reality the share of private accommodation is likely to be even bigger due to the existing non-registered and/or illegally constructed buildings.

9. According to the IEA Key World Energy Statistics 2013, the total CO_2 Emissions of Montenegro from fossil fuel combustion in 2011 were 2,50 Mtons of CO_2. No accurate GHG accounting has been established for tourism sector related activities yet, but based on a preliminary analysis done during the project preparatory phase, tourism is estimated to directly account for some 3-5 % of Montenegro's total national GHG emissions or cca 50-125 ktCO2/year, excluding the bunker and other fuels for international cross-border travel (See Tables 8.1 and 8.2 in the Annex 8.5).

[7] not including cruise and non-registered visitors.



Registered accomodation capacity as of August 2012		
Collective facilities	**Facilities**	**Rooms**
Hotels	251	12 408
Apartment hotels	9	264
Boarding houses	19	359
Motels	5	61
Holiday resorts	6	2 349
Inns	1	11
Spa	1	807
Vacation facilities	19	976
Camping sites	17	1 266
Villas	2	56
Hostels	2	10
Subtotal	**332**	**18 567**
Individual facilities		
Private rooms		24 607
Apartments		390
Private houses		26 389
Subtotal		**51 386**

Figure 1.4 Registered tourist overnights stays in 2012 by the type of accommodation facility and registered accommodation capacity as of August 2012 (Source: MONSTAT 2012)

10. Similar to the conclusions of the joint study of the UNWTO, WMO and UNEP "Climate Change and Tourism"[8], in which transport was found to be responsible for the vast majority i.e. 75% of all GHG emissions generated by global tourism, the overall carbon footprint of the travellers visiting Montenegro primarily depends on their point of departure and their chosen transportation mode(s) to arrive to and return from Montenegro. The impact of these choices is elaborated in figure 1.5, followed by figure 1.6 showing the registered arrivals in 2012 by the country of origin and figure 1.7 showing the registered international arrivals by air compared to other transport modes. The statistics for cruise visitors and yachts are shown separately in figures 1.8 and 1.9.

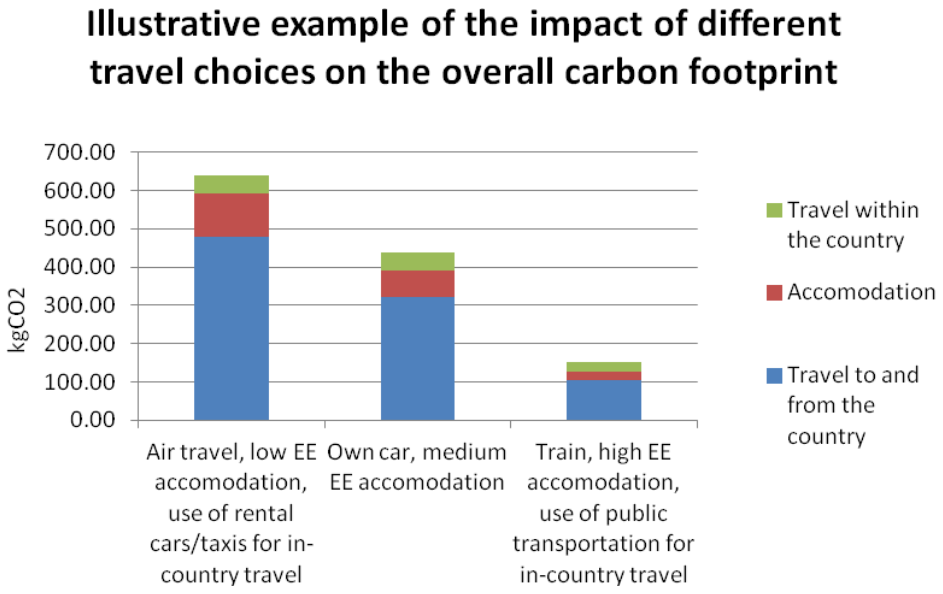


Figure 1.5 An example of the impact of different travel choices on the carbon footprint of a group of two people arriving to Montenegro for a two week vacation from a distance of about 1000 km.

[8] http://www.unwto.org/sdt/news/en/pdf/climate2008.pdf

11. For the majority of north and non-European visitors and those coming over larger distances from Russia and Ukraine, air transport is likely to remain as the most practical transport mode. From the neighbouring countries, the visitors normally travel by car, to some extent also by using the available accompanied car transport service[9] by rail from Belgrade to Podgorica/Bar.

12. The biggest barrier to significantly increasing the flow of visitors e.g. from Central Europe by rail rather than using airlines or private cars is the speed of the current railroad service being in average below 50 km/h for most parts of the Balkans. Discussion are underway, however, for the construction of a new high speed railway connection between Budapest and Belgrade[10] and if combined with the parallel further improvement of the Belgrade – Bar railroad connection, this may open up some new opportunities for attracting climate conscious and other visitors from Central Europe and elsewhere of the region also by train. Another main railroad connection from Central and Western Europe to Montenegro via Belgrade comes through Ljubljana and Zagreb.

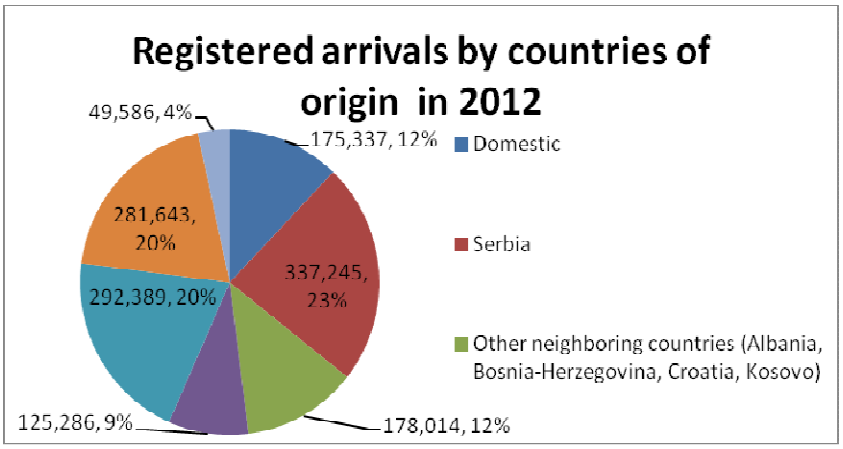


Figure 1.6 Registered arrivals by the country of origin in 2012 (not including cruise visitors)

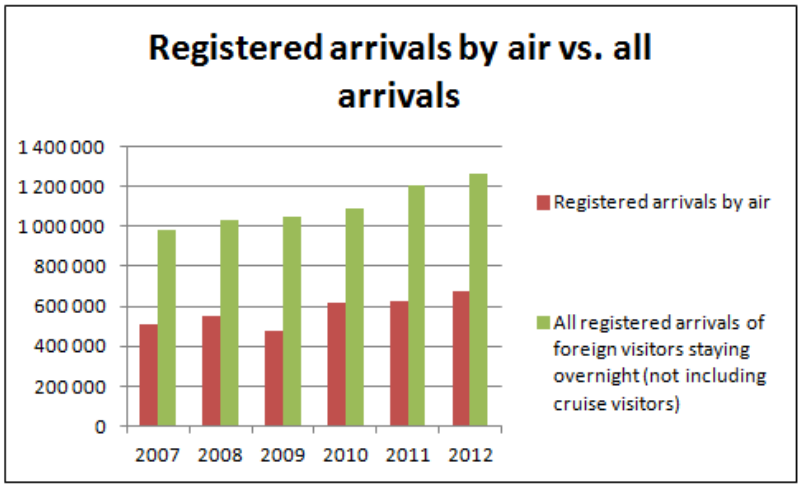


Figure 1.7 Registered passenger arrivals at Podgorica and Tivat airports (including all passengers, not only tourists) vs. all registered arrivals of foreign visitors. In 2011, the share of arrivals at Tivat airport was slightly over 50% of all arrivals by air. (Source MONSTAT 2012)

[9] http://www.zcg-prevoz.me/belgrade-special-cars.html

[10] http://www.railwaybulletin.com/2013/05/serbia-and-hungary-to-i-modernize-belgrade-budapest-railway

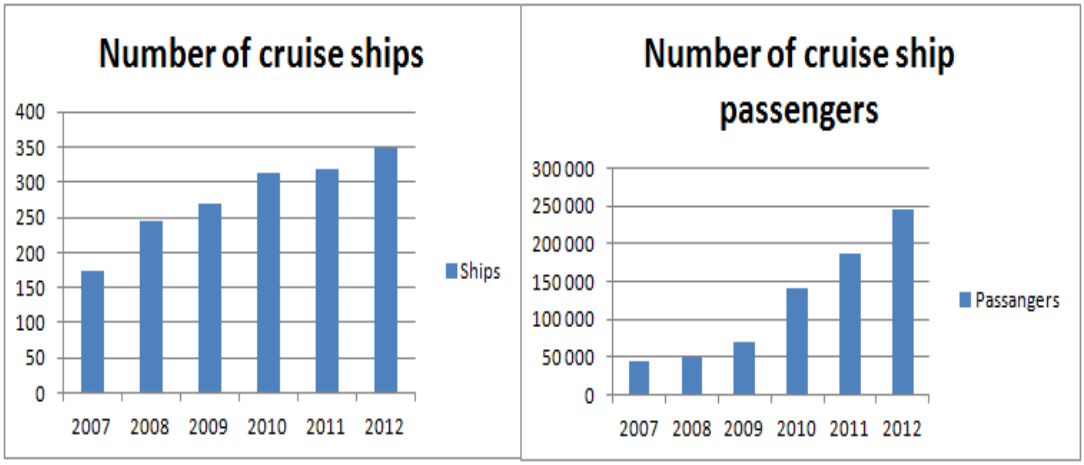


Figure 1.8 Number of cruise ships and cruise ship passengers visiting Montenegro, in particular Kotor (Source MONSTAT 2012).

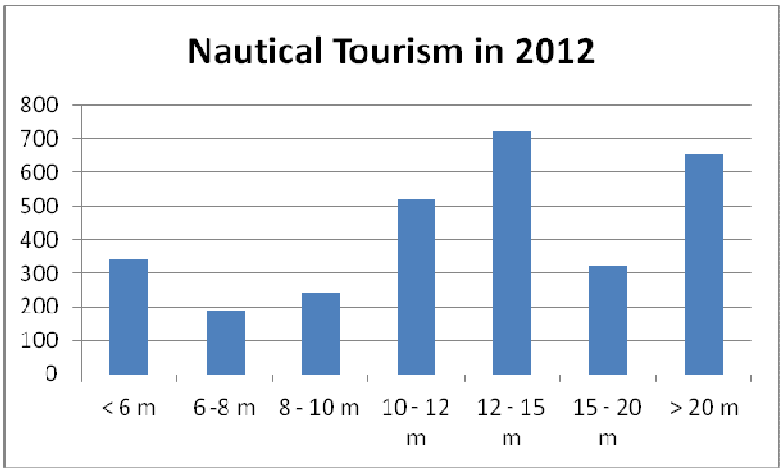


Figure 1.9 Number and size distribution of foreign private yachts visiting Montenegro in 2012 with a total of 2 987 vessels and 14 494 passengers.

13. Travelling by sea with large cruise ships and motor yachts typically presents the most carbon intensive travel mode per passenger km and they are consuming significant amount of energy with related emissions even when staying at harbours. This combined with the rapid growth in the number of visiting cruisers and yachts (as illustrated by figure 1.8) is, therefore, likely to yield quite good results from any carbon mitigation measures or carbon offset schemes implemented for these travel modes.

14. While the mitigation of tourism sector related GHG emissions from cross-border travel will not be a primary goal of this project, this area is envisaged to be addressed as a part of project's policy advice, public awareness raising and marketing activities as well as by those dealing with the carbon accreditation of the main air and marine entry ports with the implementation of related on-site GHG mitigation measures and introduction of new carbon offset schemes. Further thoughts and initial ideas for this are discussed in section 2 under outcome 2.

1.3. Energy use in the tourism sector and projected energy sector development in general

15. Information on the energy consumption and on-site energy generation in the tourism sector is not separately analyzed and published by the State Statistical Office (MONSTAT), but is reported as a part of "Households, Trade and Other Sectors". There are, however, significant discrepancies in figures presented in the draft Energy Development Strategy (EDS) until 2030 for years 2010 and 2011 and the Energy Balance 2005-2011 published by MONSTAT, which makes it difficult to derive any further

estimates for the current energy use of the tourism sector from there. Since 2012, however, MONSTAT has announced to have collected separate energy data from the touristic facilities[11], which may gradually start to improve the data availability.

Table 1.3 Estimated final energy consumption in the household and service sectors

	Draft Energy Development Strategy until 2030				Statistical Energy Balance 2005 – 2011 (MONSTAT)	
	Households (PJ)		Services (PJ)		Households, trade and other sectors (PJ)	
	2010	2011	2010	2011	2010	2011
Fuel, wood, pellets and brickets	2,02	1,92	0,00	0,00	9,50	9,69
Electricity (in TWhs in brackets)	4,45 (1,24)	4,52 (1,26)	2,38 (0,66)	2,56 (0,71)	5,79 (1,61)	4,44 (1,23)
Heat from district heating	0,01	0,01	0,01	0,01	-	-
Solar thermal	0,00	0,01	0,00	0,02	-	-
Fossil fuels total, of which	0,44	0,44	1,37	1,37	0,17	0,34
LPG	0,09	0,09	0.02	0,02	-	-
Coal	0,22	0,19	0,16	0,16	0,09	0,13
Other oil products	0,12	0,14	1,19	1,19	0,08	0,21
Natural gas	0,00	0,00	0,00	0,00	0,00	0,00
Total	**6,92**	**6,90**	**3,76**	**3,96**	**15,5**	**14,5**

16. In a survey[12] conducted in 2011 for a sample of 28 hotels of different locations, size and quality category (i.e. about 10% of all registered hotels and over 20% of the total hotel bed capacity in Montenegro), electricity was found out to be the main energy source for the majority of hotels, complemented by fuel oil and, in smaller quantities, coal, LPG, fuel wood and solar thermal. For water heating, 80% of the surveyed hotels had a central heating system using heavy fuel oil, 10% electricity and another 10% other fuels such as coal, LPG or biomass. The last 10 % share also includes solar water heating found in 9 surveyed hotels and covering, in average, up to 30 – 40% of the total hot water demand in those hotels. Six of those hotels expressed their interest to extend the SWH system due to its recognized benefits and cost saving potential and among those 19 surveyed hotels that currently do not have a solar thermal system, 10 hotels expressed their interest to do so. As such, further potential for expanding the use of solar water heating in tourist accommodation facilities clearly seems to exist.

17. Water heating typically accounts for about 15% of all energy consumption of tourist accommodation services[13], although with great variations between the different hotels (also depending on whether the hotel has a heated pool or not). Other main energy consumers are air conditioning and ventilation, space heating (when applicable), lighting and catering services.

18. For private accommodation facilities, central water heating systems in Montenegro are less common and thus the use of electricity for water heating and for meeting other energy needs correspondingly bigger. As mentioned earlier, private rooms, apartments and houses currently cater more than two thirds of all tourist accommodation needs in Montenegro.

19. The electric power supply in Montenegro in 2011 was based on hydro (29%), coal fired thermal power (34%) and net import and exchange with Serbia (37%). Depending primarily on the annual variations in hydro power generation, the net electricity import during the past 5-6 years has varied from 0% (with a record year of hydro resources in 2010) to 56% in 2007.

[11] http://www.monstat.org/eng/page.php?id=37&pageid=37

[12] Montenegrin Center for Energy Efficiency (CCEE) & GIZ: Solar Energy in the Tourism Sector in Montenegro, December 2011

[13] hes.unwto.org/sites/all/files/docpdf/analysisonenergyusebyeuropeanhotelsonlinesurveyanddeskresearch2382011-1.pdf

20. In the selected "moderate export oriented" reference scenario of the Draft Energy Development Strategy (EDS) until 2030, Montenegro is suggested to become a net exporter of electricity by 2020. This would be facilitated, among others, by the construction of new coal fired thermal power plants increasing the share thermal power generation to over 50 % in 2018 and after. This would inevitably lead to a significant increase of the specific GHG emissions of also the tourism sector, thus making it more difficult to market Montenegro as a truly low carbon tourist destination. Besides, all tourist accommodation facilities applying for an eco-certificate would need to implement complementary measures for meeting the criteria of, for instance, the EU Eco-label that "at least 50% of the electricity used for all purposes should come from renewable energy sources". ***The total GHG emissions of power generation in the EDS reference scenario are projected to increase from the current 1.6 million tons to 5.35 million tons of CO_2 per year in 2030, while the SO_2 emissions are projected to double***.

Table 1.4 Envisaged developments of the electricity supply and consumption (GWh) in 2012 -2030 in the EDS Reference Scenario.

Year	TPP Pljevlja I	TPP Pljevlja II (225 MW)	TPP Maoce (350 MW)	EPS - HPP Piva 1)	HPP Perucica	HPP on Moraca river	HPP Komarnica	Small HPPs	Wind power plants	PV power plants	Biomass power plants	Net import / export	Gross consumption of electricity 2)
2012	1,150			1,065	958			21				1,762	4,956
2013	1,150			1,065	958			21			1	2,120	5,315
2014	1,150			1,065	958			21	106	3	19	2,128	5,450
2015	1,179			1,065	958			237	271	5	23	1,798	5,537
2016	1,179			1,065	978			237	289	10	31	1,862	5,651
2017	1,179			1,065	978			329	289	12	47	1,865	5,762
2018	1,179		2,210	1,128	978			422	289	13	59	-430	5,847
2019	1,179		2,210	1,128	978	721		422	289	15	65	-1,079	5,927
2020	1,179		2,210	1,128	978	721	232	422	348	17	101	-1,328	6,007
2021	1,179		2,210	1,128	978	721	232	422	348	19	113	-1,248	6,102
2022	1,179	1,360	2,210	1,128	978	721	232	422	348	23	121	-2,556	6,166
2023	1,179	1,360	2,210	1,128	978	721	232	422	348	27	129	-2,502	6,231
2024	1,179	1,360	2,210	1,128	978	721	232	422	348	31	136	-2,450	6,295
2025	1,179	1,360	2,210	1,128	978	721	232	422	387	36	144	-2,438	6,359
2026	1,179	1,360	2,210	1,128	978	721	232	422	387	41	153	-2,377	6,434
2027	1,179	1,360	2,210	1,128	978	721	232	422	387	44	162	-2,314	6,509
2028	1,179	1,360	2,210	1,128	978	721	232	422	387	47	170	-2,250	6,584
2029	1,179	1,360	2,210	1,128	978	721	232	422	387	49	179	-2,186	6,659
2030	1,179	1,360	2,210	1,128	978	721	232	422	436	52	188	-2,172	6,734

21. Apart from hydro power and the traditional use of fuel wood by the households for heating and cooking, the use of other renewable energy sources has not really taken off in Montenegro yet. Concessions for 35 new small hydro power plants with total planned capacity of 97 MW and estimated annual power generation of 300 GWh and two wind farms (in Ulcinj/Bar and Niksic/Šavnik) with planned total capacity of 118 MW and estimated annual power generation of about 270 GWh have already been issued, however. For solar PV, no concrete projects are in operation or in the planning phase yet apart from some small pilot projects such as a small 5 kW system used in Perast for charging electric cars and bicycles and solar PV panels installed on the roof of the new UN building with total capacity of 136 kW.

22. In order to encourage investments in renewable energy based power generation, the Ministry of Economy introduced in September 2011 new premium feed-in tariffs for electricity purchased from renewable energy sources. Power purchase contracts are signed with the energy market operator (CGES A.D.), are valid for 12 years and paid monthly. The power purchasing price during the contract period is automatically adjusted annually also for inflation. For further details, see table 1.5 below.

Table 1.5 Current feed-in tariffs in force for electricity produced by renewable energy sources[14]

Category	**Price (in eurocents /kWh)**
Wind power plants	9,60
Power plants using solid biomass from forestry and agriculture	13,71

[14] http://wbenergyprojects.blogspot.fi/2011/11/update-on-new-renewable-energy-plants.html

from wood processing industry	12,31
Solar power plants on buildings and construction structures	 15,00
Power plants using solid landfill waste gas from waste biogas	 9,00 9,00 15,00
Small hydro power plants that produce electricity: up to 3,0 GWh per year between 3,0 and 15,0 GWh pear year more than 15,0 GWh per year	 10,44 7,44 5,04

23. At the same time, the costs of particularly solar PV systems have considerable come down over the past years[15]. While several small hydro and a few wind farms are already in the pipeline and have applied and received a concession for construction, the PV market in Montenegro has not really taken off yet despite the very favourable cost development, as illustrated by figures 1.10 and 1.11.

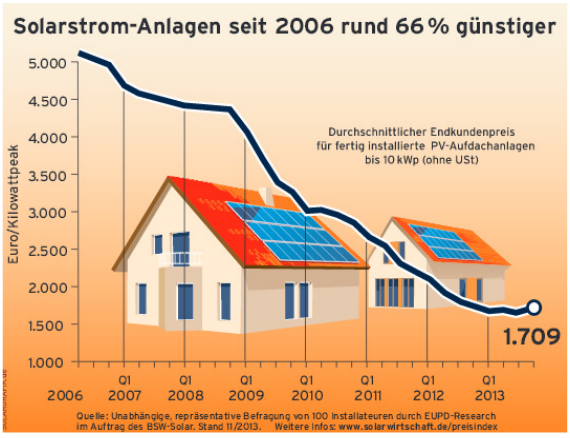


Figure 1.10 Average end-user price of installed grid connected roof-top PV systems up to 10 kWp in Germany [16]

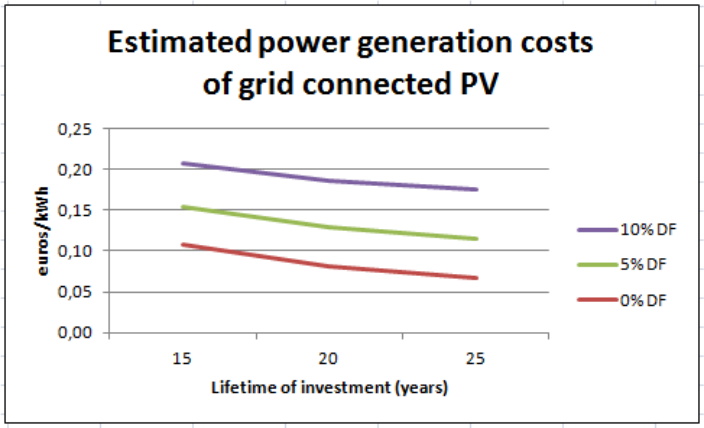


Figure 1.11 Estimated power generation costs of grid-connected solar PV (based on the investment costs of 2 000 Euros/kWp and discount factors of 0%, 5% and 10%)[17]. The lifetime of good-quality PV panels is typically over 25 years before the power generation rate starts to deteriorate.

[15] http://reneweconomy.com.au/2013/deutsche-bank-solar-distributed-energy-at-major-inflection-point-10487

[16] Source: http://www.solarwirtschaft.de/fileadmin/media/Grafiken/pdf/BSW_Preisindex_1304.pdf

24. For thermal energy, the EDS projections for renewable energy use are presented in table 1.6 below.

Table 1.6 Projections of the EDS for renewable energy based heat generation up to 2030 (GWh).

Vrsta korišćenog OIE	2010	2015	2020	2025	2030
Utilised RES in EB (total) [1]	*565,0*	*645,1*	*842,1*	*997,0*	*1.211,0*
Accounted RES for the needs of NTRES calculation, total (1-4), of which: [2]	565,0	629,0	790,0	924,4	1.116,8
1. Solar (thermal)	5,0	17,5	39,2	68,7	121,0
2. Biomass [3]	560,0	610,1	741,0	830,7	959,8
3. Geothermal energy [4]	0,0	1,4	9,8	25,0	36,0

25. For the transport sector, the EDS is proposing a target of 10% share of renewable energy by 2020 in accordance with the EU Renewable Energy Directive (2009/28/EC). This target is primarily to be met by biofuels, but can also be partly served by RE generated electricity.

26. At the moment, there is no reliable nation-wide data on energy saving potential of the existing building stock. For getting some estimates for this, UNDP was supporting in the frame of the "EE Based Legalization of Informal Settlements in Montenegro" project energy audits in 34 single family houses with an average size of 126 m^2. The identified energy saving opportunities for electricity consumption were ranging from 4% up to 60% being in average about 20 % from the measured baseline electricity consumption.

27. For improving the energy efficiency of the new building stock, including construction of new tourist accommodation facilities and those subject to major rehabilitation, the Ministry of Economy in cooperation with the Ministry of Sustainable Development and Tourism adopted a set of 5 rulebooks that entered into force in May 2013 as secondary legislation to implement the Law on Energy Efficiency[18]. The provisions of the Law together with the adopted secondary legislation contribute to the transposition of the EU Energy Performance in Buildings Directive (2010/31/EU).

28. The adopted rulebooks include:

- Rulebook on minimal Energy Efficiency requirements in Buildings (Official Gazette of Montenegro 23/2013 of 27.05.2013) defining the minimal requirements related to energy efficiency of buildings, types of buildings which according to their purpose are not required to meet minimum energy efficiency requirements and methodology for calculating energy performance of buildings. Tourist accommodation facilities are not separately addressed in the rulebook, but they fall under the category of residential buildings, namely apartment buildings for tourism;
- Rulebook on the Regular Energy Performance Certification of Buildings (Official Gazette of Montenegro 23/2013 of 27.05.2013)[19] which defined in a detailed manner certification of buildings, manner of determining the energy class of building, layout and content of the table with basic energy performance of public buildings, content of certificates and registry of issued certificates on energy performance of buildings and types of buildings, which are not certified, according to their purpose. The certification will mandatory from the beginning of 2014 for both new buildings those going through a major rehabilitation;
- Rulebook on the methodology for performing energy audits of buildings (Official Gazette of Montenegro 23/2013 of 27.05.2013.) determining the methodology for performing energy audits of buildings;
- Rulebook on training program for energy audits, content of the requests for issuing authorizations and registry of authorized persons (Official Gazette of Montenegro 24/2013 of 31.05.2013) determining the training program for energy audits of buildings and regular energy audits of heating systems and air

[17] Assumptions: Initial investment EUR 2 000/kWp, annual yield 1,300 kWh/kWp, annual O&M costs: EUR 0.005/kWh.

[18] Official Gazette of Montenegro 29/2010

[19] Start of implementation postponed until the beginning of 2014 pending the availability of a software tool to be developed with a Norwegian project support in 2013.

conditioning systems, content of the requests for issuing authorizations for performing energy audits and detailed content of the registry of authorized persons for performing energy audits; and

- Rulebook on regular energy audits of air conditioning systems and heating systems (Official Gazette of Montenegro 24/2013 of 31.05.2013) determining the manner and deadlines for performing regular energy audits of air conditioning systems of nominal power of 12 kW and larger and gas, liquid or solid fuels heating systems of nominal power of 20 kW and larger. The frequency of the audits is 5 years for air conditioning systems up to 35 kW and 2 years for higher capacity systems. For heating systems, the frequency of audits is 5 years up to the capacity of 100 kW and 2 years for larger systems. All tourist accommodation facilities with have air-conditioning systems equal or larger than 12 kW or heating systems equal or larger than 20 kW are subject to this regulation.

29. Although some rulebooks described above have already entered into force, the Ministry of Economy is still missing the required software for managing and monitoring the implementation of these regulations. This is currently under preparation, however, and once done, the effective enforcement of all adopted regulations can start under the supervision of the Energy Efficiency Unit of the Ministry of Economy. Tourist accommodation facilities do not have special treatment over others, but are subject to the same regulations. As mentioned before, however, the regulations discussed above apply only to new buildings and those undergoing major renovation. Therefore, most existing tourist accommodation facilities remain outside of the scope of these new regulations, but are addressed by the project by promoting their environmental certification, including also EE and RE related requirements.

1.4 Transport

30. The vision of the latest Transport Development Strategy of Montenegro (TrDS)[20], adopted in 2008, is to "provide quality transport system for users, which will be safe, sustainable, integrated in the European systems and which will support and stimulate economic growth in the state."It calls for new sustainable development concept, where financing of the infrastructure development must be provided in a way that eliminates bottlenecks in the traffic and achieves a balance between the use of maritime and rail traffic in relation to the road traffic. Undeveloped road network, problems in the railway sector as regards the condition of the infrastructure and outdated vehicles, requirements for more efficient airport operation and low capacity utilization of Luka (Port) Bar were listed among the key areas to be addressed to support the economic development of the country. Proposed measures to reduce the environmental impacts of road and marine transport are elaborated under the TrDS strategic goal #5.

Road Transport

31. Montenegro has one of the least developed road networks in Europe, to which the challenging topography is a major contributory factor: Over 55 % of the territory of Montenegro is at the altitude of 1000 meters or higher with steep slopes dominating the view and leading to high construction and maintenance costs. The rapidly grown and strong seasonal characteristics of the tourism are multiplying the traffic during the few summer months, which is creating major congestion problems especially at the coastal roads. Contributing factors are the absence of by-passes forcing the transit traffic to pass through the city centers and the Kamenari – Lepetane ferry connection over the Kotor Bay as one of the additional bottle necks for road transport from Herceg Novi to Tivat and Budva.

32. Among the main road construction projects listed in the TrDS with a particular impact on longer term tourism sector related transport planning, the following can be mentioned:

- Construction of the 164 km long Montenegrin (Bar – Boljare) section of the cross-border Bar – Belgrade Toll-Highway. The bidding for the construction of the first 41 km middle section was concluded in July 2013 and won by two Chinese construction companies supported with financing from the Chinese EXIM Bank[21]. At the Serbian side, the construction has already

[20] http://www.minsaob.gov.me/en/library/strategije

[21] http://www.balkans.com/open-news.php?uniquenumber=178245

started with the expected completion of the entire 330 km Serbian section of the highway in six years.[22]

- Construction of the Montenegrin section of the Adriatic-Ionian highway planned to run along the western coast of the Balkans from Trieste, Italia to Kalamata, Greece. While a major part of this corridor in Croatia, Slovenia and Italy connecting it to the Western European highway network has already been finalized, the extension of the highway from Ploče, Croatia, to the border of Montenegro through Bosnia-Herzegovina (about 150 km) and the 100 km long section in Montenegro are still at the design phase.
- Construction of a new 110 km long Express Road along the Montenegrin coast (see figure 1.11) connecting with the border-crossings with Croatia and Albania and starting with the construction of by passes for Herceg Novi and Budva. Also including a bridge over the Kotor Bay to replace the current ferry connection. Total anticipated costs around 6,6 million EUR per km. Still at the design phase.

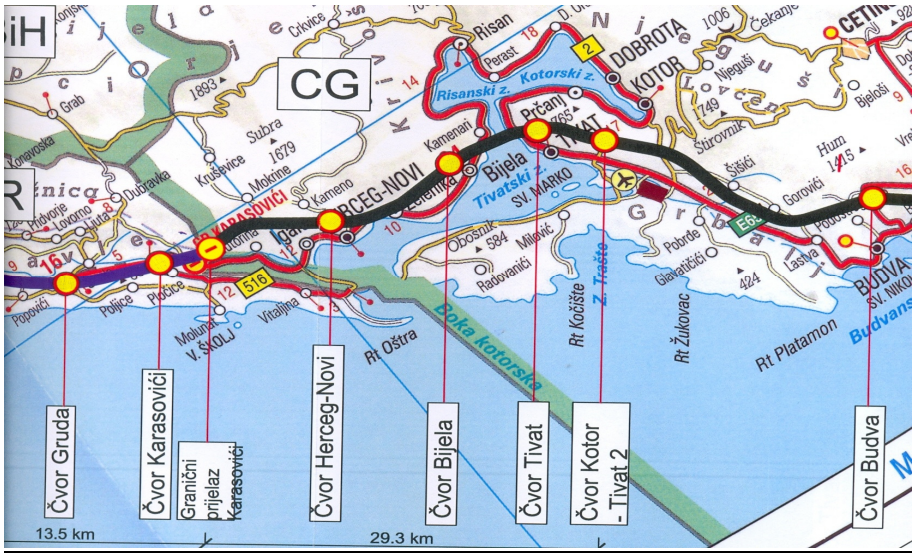


Figure 1.12 Planned route of the new coastal express road up to Budva

Public transportation by road

33. The road based public transportation service for intercity travel in Montenegro relies entirely on private companies operating on a self cost recovery basis without any public support.[23] For international connections, the most frequent service is to Serbia and Bosnia-Herzegovina. From Dubrovnik airport in Croatia with a distance of about 30 km from Herceg Novi, no regular bus or any other public transportation service (apart from private taxis) is available to Montenegro yet.

Railroads

34. Rail transportation sector has gone through significant reforms during the past few years. Rail transport in Montenegro is currently managed and operated by four independent companies taking care of the railway infrastructure, passenger transport, cargo transport and maintenance of the rolling stock. All companies were earlier (until 2008) a part of the public company "Railways of Montenegro".

35. The passenger transport is currently managed by a joint-stock company "Railway Transport of Montenegro" (ŽPCG AD). Since its establishment, the company has suffered from operational losses

[22] http://www.see-business.eu/serbia/serbia-business/serbias-first-section-of-corridor-11-from-ub-to-lajkovac-will-be-fully-completed-by-year-end/

[23] Source: Informal consultations during the mission

and has had difficulties to improve the quality of the service due to the ageing fleet and the ongoing reconstruction works not allowing the company to significantly shorten the travel time between Bar and Belgrade yet. Especially the Serbian part of the Bar – Belgrade connection has remained in a relatively bad shape allowing average speed of the trains up to 40-50 km/h only.

36. For improving the operational safety of the two main railway corridors in Montenegro, the EBRD has supported the rehabilitation of the Montenegrin part of the Bar – Belgrade railway with a €15 million sovereign guaranteed loan signed in three tranches in 2007-2009 and with its extension of €10 million signed in 2012 to complement the works. Another €15 million loan under the "Montenegro Rail Infrastructure Emergency Rehabilitation Project II" was provided for upgrading the Niksic – Podgorica railroad. Beside improved safety, the reconstruction is facilitating higher speed of the trains, which until now, however, has continued to suffer from the remaining reconstruction works.

37. As rightly noted in the TrDS, rail passenger transport offers an ecologically better travel mode only under the condition that the amount of passengers using the service will be adequately high to ensure its efficiency, being also a prerequisite for the financial sustainability of the company operating these services. While some signs of recovery in passenger amounts could be observed during the first two quarters of 2013[24], the ŽPCG continues to face major challenges in trying to balance the fleet modernization needs and improvement of the overall service level in an effort to attract more passengers, while still managing the costs and keeping also the ticket pricing attractive enough. The new Bar – Belgrade highway, expected to be finalized in 6-7 years time, will not make the situation any easier. On the other hand, possible construction of a new high speed train service between Budapest and Belgrade together with the parallel further improvement of the Belgrade - Bar connection may open up some new opportunities for attracting rail passengers over longer distances. The scenery along the railroad to the Montenegrin coast would also support to make this a travel experience on its own.

38. In any case and not least because of the construction of the new Bar-Belgrade highway, the use of private cars is likely to remain the preferred and proportionally growing travel mode by the majority of visitors arriving from the neighbouring countries. This also means that the environmental challenges due to the increased road transportation and congestion may rather grow than to decrease over the coming years by new roads attracting new tourists to enter Montenegro by car over longer distances and thereby further accelerating the congestion related problems in the coastal cities. This despite the efforts to construct new roads and by-passes also there. In general, the experience from other cities and countries has shown that the construction of new roads often provides only a temporary solution to the congestion related problems and may just move the problems to somewhere else. Therefore, truly sustainable transport solutions are needed to address GHG emissions reduction targets from travel & tourism in Montenegro.

Airports

39. The master plans of Montenegro's two international airports, Podgorica and Tivat, contain projects for expanding the capacity of both airports by extending the runways, passenger and cargo terminals, increasing the space for car parking etc. in order to improve the capacity and quality of the service in response to the projected demand. Further development of the Berane airport at the northern part of Montenegro to become the third international airport of Montenegro has also been discussed.

40. At Podgorica airport, the amount of passengers was forecasted in 2010 to increase from 451,000 in 2009 to 1,14 million in 2015, 2,9 million in 2025 and 3,2 million in 2030.[25] At the Tivat Airport, the number of passengers was projected to increase from 532,000 in 2009 to 919,000 in 2015, 1,37 million in 2025 and 1,43 million in 2030[26]. This would present a huge growth in airline travel i.e. more than 50 % by 2015 from the recorded amount of passengers in 2012, over 200% by 2025 and close to 250 % by 2030.

[24] http://www.monstat.org/eng/page.php?id=1129&pageid=36

[25] The number of arrivals can be estimated to be about half of the total number of passengers

[26] http://www.infomercatiesteri.it/public/images/paesi/79/files/Infrastrutture%20stradali%20e%20aeroportuali.pdf

1.4. Baseline, barriers and current government policy to address the root causes and threats

41. In the business-as-usual scenario the annual CO2 emissions from tourism sector related activities in Montenegro will continue to grow from the current estimated 70 – 100 ktons to over 170 ktons in 2023[27] as a result of large-scale investment in tourist infrastructure and constantly growing number of travellers. The projected development of the energy supply structure into more carbon intensive direction will further accelerate the growth of GHG emissions, as discussed earlier in chapter 1.3.

42. There are several pieces of primary legislation in Montenegro regulating or having an impact on the tourism sector such as Law on Proprietary Relations, Law on Tourism, Law on Nature Protection, Law on Waste Management, Law on National Parks, Law on Waters, Law on Communal Activities, Law on Spatial Planning, Law on Protection of Air, Law on Reducing Pollution from Ships, Law on Legalization of Informal Objects, Law on Energy Efficiency as well as a series of secondary legislation such as Tourism Strategy Development in Montenegro by 2020, Decree on Protection from Noise, Rulebook on the requirements of the organized and developed bathing areas, Rulebook on the categorization of the tourism places, Rulebook on the forms and content of the license etc.[28] This highlights the multi-sectoral nature of tourism and the potential for differences on such issues as spatial planning and tourism development. Responsibility for both areas now lies within the same Ministry, however. The process of accession of Montenegro to the European Union is gradually leading to the harmonization of numerous features of the legal and institutional environment with the EU Acquis.

43. Long-term co-ordinated planning at the national level is a prerequisite for successful development of sustainable and low-carbon tourism. This was clearly recognized also by the Government of Montenegro in the early 2000s, when it started to rebuild its tourism industry. The first master plan for Sustainable Tourism development was produced in 2001 and approved by the government in 2002. The revised Tourism Development Strategy to 2020 (TuDS) released in 2008 and followed by the Strategic Environmental Assessment (SEA) of the plan was refocusing Montenegro's tourism strategy placing much more emphasis on its environmental and other sustainability aspects. As stated in the forewords of the TuDS, the goal of the strategy is to assure "that tourism continues to be an engine for growth and generates the right kind of growth – smart growth, sustainable growth, balanced growth - and that the benefits of tourism are not only maximized, but broadly distributed socially and geographically". This is sought to be achieved, among others, by:

- further developing the diversity of the offer with a broad range of products and services matching the expectations of a variety of "high-end" target groups (whether cultural, culinary, adventure, "close to nature" or just relaxation) with a goal to reduce the vulnerability of Montenegro to only one-type of beach tourism, to enhance the local income and employment generating opportunities also in hinterlands and to extend the season with a goal to make Montenegro an year around travel destination;
- improving the quality of accommodation and related services with extended facilities for different kind of sports, health, wellness and entertainment and also including an increasing number of heated pools and artificial bathing environments to extend the season and to reduce the pressure on public beaches; and
- investing in human capital by training and education.

44. The SEA review specifically mandated that a formal Tourism and Environment Monitoring plan is to be set up by the government and applied at the municipal as well as at the national level. This should set targets and indicators for delivery of infrastructure improvements and environmental protection measures related to major tourism projects. It also requires that details of the necessary infrastructure, communal facilities and services are to be provided alongside development proposals. These include the provision of adequate water supply, sewage and wastewater treatment, solid waste collection and

[27] "rough" tentative estimates excluding cross-border travel

[28] Vucetic, A: Tourism policy and institutional economy in the function of growth and development of the destination product of Montenegro (http://www.mnje.com/sites/mnje.com/files/mje_2012_v08-n03-a17.pdf)

disposal, road improvements, public transport, car parks and traffic-free areas, and consistent measures on improving energy efficiency and use of renewable energy.

45. The National Strategy for Integrated Coastal Management (NSICM) is a key guiding document for the coastal areas. The tourism-related challenges highlighted in the strategy include, among others:

- severe problems with traffic congestion, overcrowded beaches and functioning of the public services during the peak season of July and August;
- lack of adequate wastewater treatment;
- division of responsibilities between different levels of government (local and national) and a number of relevant authorities and other entities, which reduces efficiency in establishing order and normal functioning in the total area; and
- tremendous increase in interest of foreign investors and private individuals to locations in the coastal area have resulted in a boom in the housing market - a key development challenge.

46. In order to implement above mentioned strategies, the government is making a major effort to provide adequate spatial planning documentation, which is a prerequisite for all investments in the touristic sector. Currently, Montenegro is developing a Spatial Plan for Coastal Zone, covering an area of 58 km^2 (along 313 km Adriatic coastal line) and has financed this effort with over 1.4 million euros. This document will be finalized in the next 1,5 years. Additionally, Ministry of Sustainable Development and Tourism is regularly publishing an annual program for spatial development, in which they are announcing spatial planning documentation, which will be developed in the forthcoming period in accordance with national priorities. As stated in the annual program published in March 2013, the government is planning to invest in the development of the following spatial plans that are important for the project area:

- State Location Study for "Sectors 20 and 21" - 8,1 ha area of pedestrian zone "lungo mare" in Lepetani settlement (Tivat municipality, Boka Bay) and ferry dock (Kamenari-Lepetani ferry line, connecting Herceg Novi and Tivat), estimated cost 80.000 eur
- Plan of continental coastal shelf (extended perimeter of coastal zone) - estimated cost 300.000 eur (45,000 euros already provided from state budget, rest open for donations)
- Few State Location Studies within Spatial Plan of Coastal zone, which locations will be defined in accordance with priorities of Agency for Coastal Management - estimated cost 170.000 euros
- Development of SEA for above listed spatial plans - estimated cost 50.000 euros

47. In addition to the above, every Municipality, from their own budget, is investing in the development of spatial planning documents at local level and priority areas are being defined on annual basis. Average yearly investment for development of planning documentation in each of 4 municipalities in project area is around 100 000 euros.

48. In parallel, municipal sustainable tourism development master plans are being worked out. The first municipal initiative of this sort was the master plan for sustainable tourism development in Kolašin, developed and implemented with assistance from the Italian Government. The master plan identifies specific measures and actions in ten key areas: urban development; transport and mobility; buildings (architecture and materials); energy and carbon emissions; waste management in urban settlements; water supply and wastewater management; basin management, forest management; tourism valorisation of natural resources; and promotion and marketing of sustainable tourism.

49. While environmental and other sustainability concerns (including social, cultural and economic) are well addressed at the general level in the Government's key strategy documents such as the TuDS, the climate change impact of the defined strategic goals or specific measures for attracting environmentally conscious tourist trying to minimize their carbon footprint, are not specifically discussed. The environmental considerations are primarily focusing on the most immediate local impacts in an effort to

protect biodiversity and the natural beauty of Montenegro. Based on the initial review and consultations conducted during the project preparation, there seems to be no particular document and no given specific responsibility within the state for the control of GHG emission reduction and low carbon strategy implementation similar to, for instance, in Slovenia[29].

50. The National Council on Sustainable Development and Climate Change[30] provides a good basis for strengthening the low carbon Strategy development in Montenegro, but efforts at the legal and regulatory side would need to be intensified. Beside the eventual need to develop a specific Low or No-Carbon Development Strategy, the following laws and strategy documents, among others, were identified to be in the need of review and upgrading by specific provisions to support low carbon tourism development:

- Law on Tourism and the related rulebooks such as the "Rulebook on classification and minimum standards for categorization of the accommodation facilities"
- Montenegro's Tourism Development Strategy to 2020 would require an extension to assess the impacts and, as needed, refine the strategic goals from the low carbon tourism development point of view, as well as announcement of the Low Carbon Tourism, LCT, Action Plan;
- The Law on Spatial Planning and Construction of Buildings (Official Gazette of Montenegro, No. 51/08) together with the associated rulebooks on more detailed content and form of a planning document, land use criteria, urban regulation elements related to sustainable and low carbon behaviour;
- Transport Development Strategy of Montenegro (2008) would need a revision and extension or separate document dealing with carbon footprints of all the transport sectors: ground, air and water transport and policies towards lowering the GHG emissions by coordinated, cross-sectoral action.

51. Beside the documents listed above, the legal basis for specific financial or legal mechanisms and incentives for mitigation carbon emissions and carbon neutral behaviour should be provided, among others, within the Law on Local Self Government and the Financing Local Self Government, Law on PPPs, or other relevant legislation on public financing and taxation

52. Another issue is that the operationalisation of the strategies at the ground level has remained a challenge, as evidenced, for instance, by the largely uncontrolled development of Budva, lack of environmental certification and related monitoring of most existing tourist accommodation facilities and rapidly increased number of visits of big cruisers in Kotor Bay without really controlling or putting limitations on their environmental impact. Strategies are quoted, but not yet adequately transformed to concrete measures, nor are guidelines and rules adequately followed up at the operational level, for instance, in urban planning.

53. Some positive steps contributing to the mitigation of the carbon footprint of also the tourism industry have, however, been taken such as the adoption of new premium feed-in tariffs for renewable energy based power generation in 2011, adoption of new energy efficiency standards in June 2013 for all new construction and those subject to major rehabilitation, EU Ecolabel (3) and Green Globe (1) certification of the first tourist accommodation facilities in Montenegro, new large tourist resort developments such as Porto Montenegro, Lustica and Kumbor incorporating environmental management and/or energy efficiency certification (such as ISO 14000, LEED[31] etc.) into their planning and operation, development of the local Wild Beauty Brand and certification scheme (primarily for mountain areas), introduction of some new public transportation ideas such as the planned cable car to connect the coast with Cetinje (although not primarily driven by any environmental or climate change

[29] http://www.arhiv.svps.gov.si/en/climate_change/index.html, http://www.mko.gov.si/en/areas_of_work/climate_change/

[30] For further details, see chapter 1.6

[31] Leadership in Energy and Environmental Design (LEED), a building certification scheme developed and managed by the U.S. Green Building Council

concerns), active marketing and improved rail connection Belgrade – Bar to attract the private car users to move themselves and their cars to the coast by rail instead of driving themselves and new bike lending services and car free zones such as those in Tivat and Perast and the national "Bed and Bike" scheme. More needs to be done to accelerate these steps, however.

54. By building on the above, the main identified barriers to the development of low carbon tourism in Montenegro can be summarized as follows (with further details in Annex 8.6):

- Inadequate institutional capacity (affecting both central and local municipal administrations) to effectively operationalize, implement and enforce the adopted strategic goals to promote environmentally sustainable low carbon tourism in Montenegro;
- Unclear and in some cases ineffective division of responsibilities, co-ordination and co-operation between the central government, local municipal administrations and the private sector, also as it concerns the vision and operational responsibilities of the national tourist organization (NTO) vs. the local ones;
- Climate change considerations not yet fully integrated into all sectoral planning and strategy formulation, thereby often resulting uncoordinated and sometimes conflicting policies, strategies and new project initiatives;
- Lack of general public awareness on the GHG emission impact of different factors affecting the tourism sector development and the different technical and other options for mitigating those emissions;
- Not strong enough demand for low or no carbon tourism yet to increasingly motivate the private sector and policy makers to invest in new low or no carbon transport and/or accommodation services and take that into account in the policy formulation;
- Lack of awareness and knowledge of the visiting tourists on their carbon footprint as well as absence of readily available information and concrete calculation tools to support the selection between different travel options on the basis of their carbon footprint; and
- Lack of public funds and applicable financing mechanisms to support low carbon tourism development, for instance, for organization of regional low carbon public transportation in the form of financial and/or fiscal incentives or risk sharing.

1.5. Institutional Framework and Stakeholder Analysis

55. By its constitution, Montenegro has declared to be an "ecological state" being the first country globally to do this. It has applied for membership of the European Union and is currently harmonizing its environmental and other legislation with the EU requirements. This also applies for Environmental Impact Assessments, the requirements for which have been developed in accordance with the EU legislation and include provisions for public hearings and consultation.[32]

56. The National Council for Sustainable Development, NCSD, was established in 2002 with the current composition as follows: Prime Minister (chair of the Council) and 5 other Government representatives, including the Head of the Division for the support to the NCSD (formerly the Office for Sustainable Development) acting as the a secretariat of the Council, 3 mayors (from three different regions of Montenegro), 2 members of the Academia, 4 representatives of the business sector, 4 representatives of the civil sector (one of the NGO representatives serves as a vice-chair of the Council) and 4 independent experts/persons in the area of sustainable development.[33]

57. The reorganization of the NCSD is currently in progress. The reorganized Council will focus more closely on climate change issues, which is also reflected in the change of its name to National Council for

[32] http://www.esdn.eu/?k=country%20profiles&s=single%20country%20profile&country=Montenegro#basic

[33] http://www.uncsd2012.org/content/documents/364MNE%20national%20report_Rio20%20preparations_FINAL%20OSD.pdf

Sustainable Development and Climate Change. The revised Council was to hold its first session with the renewed structure in July 2013, but this was later postponed for December 2nd, 2013. After this, the Council can be considered to be officially established and can be approved by the Parliament. The Council will be responsible for the initiation of the proposal and adoption of Montenegro's Low Carbon Strategy, followed by an action plan and a proposal for the division responsibilities between the different Government entities for adjusting Montenegro's procedures and practice to EU Low Carbon Standards.[34]

58. The Ministry of Sustainable Development and Tourism (MSDT) has a legal mandate to implement the National Sustainable Development Strategy and the Tourism Development Master Plan. It will be the lead partner of the proposed project and via its two departments on Tourism and Urban Planning will assume the primarily responsibility for the implementation of the project.

59. The Environmental Protection Agency (EPA) of Montenegro was established in 2009 with the main responsibilities as follows: i) environmental monitoring, analysis and reporting, ii) issuance of environmental permits; iii) international co-operation, communication and information management in the area of environment; iv) environmental inspection; and v) service for legal and financial affairs. EPA together with the Statistical Office of Montenegro (MONSTAT) is foreseen to be engaged in the implementation of component 4, as it concerns the establishment of a GHG monitoring system and possibly in component 1 on matters related to environmental certification.

60. The Ministry of Finance (MoF), as the key national agency in charge of taxation and budgetary issues, will be closely involved in Component 3, regarding the establishment of a National Tourism Climate Fund and identification and adoption of suitable financial and fiscal mechanisms for its capitalization.

61. The Ministry of Transport, Maritime Affairs and Communications (MoT) will be project's leading counterpart for the implementation of Component 2, as the development of sustainable transport is directly related to its mandate.

62. Municipalities of Cetinje, Herceg Novi, Tivat, Kotor and others: The municipal authorities and staff will be primarily involved as beneficiaries and implementing partners for the design and implementation of Spatial Plans and Integrated Coastal Transport Strategy and related demonstration projects. Furthermore, they are responsible for issuing construction permits and operation licences for hotels with area less than 1000 m^2, in which context the project seeks to strengthen their capacity to evaluate the applications from the required energy and environmental performance point of view. Cetinje municipality has a particular role as one of the key stakeholders and investors of the planned cable car project.

63. National Tourism Organization of Montenegro (NTO - http://www.montenegro.travel/en) is an institution set up by the Government of Montenegro with the main objective of promoting Montenegro as a travel and holiday destination. It runs domestic and international PR and marketing campaigns, and also offers training, information and professional advice to its partners and other stakeholders. NTO will be closely working with the project's PR and marketing related activities and will also serve as a platform to engage with the tourism industry stakeholders.

64. Concerning the private sector engagement, it is to be recognized that many tourism development strategies (including tourism development strategies for Montenegro) may fail to deliver because they assume the local authorities to have the primary role in developing tourism rather than adequately addressing and empowering the private sector. Tourism is driven by the private sector industry and unless the hearts and minds of the private sector are won over to the concept of low carbon tourism and they see its benefits, a regulation-based approach to low carbon tourism is highly likely to fail. An approach to tourism development centered on placing responsibility to Government rather than the

[34] Good source of knowledge and policy might be Slovenia, where the process started in 2009.

industry is not a responsible tourism approach: Successful responsible tourism requires collective ownership and responsibility for managing its impacts.

65. Initial consultation have already taken place and partnership opportunities have been identified with the industry representative associations and it is essential that these consultations are continued and that they are given a strong role in being responsible for assisting project implementation. Key industry associations are the Tourism Associations of Cetinje, Kotor and Tivat, the Montenegro Hotel Association and the various chapters of the Montenegro Tourism Association (hotels, travel agents, apartments, transportation).

66. The Montenegro Tourism Association (*Crnogorsko Turisticko Udruzenje* - http://www.ctu-montenegro.org) is representing the private tourism sector industry with several pillars, of which one is the hotel sector. The CTU offers the following services to its members:

- Mediation in solving problems on local and national level and representation of interest.
- Struggle against the grey market in all sectors of tourism.
- Protection of environment as a basis of tenable (sustainable) development of tourism.
- Building of better business surrounding and environment, dialog with politics and influence on political development that influences tourism sector.
- Providing strong position of Montenegro on international competitive market.
- Active role in the managing bodies of local and national tourism organisations, as well as other public institutions, with the goal of further developing of tourism in Montenegro (Public Private Partnership).
- Providing quality of tourism offer and services of Montenegro.
- Consulting.
- Organization of study tours and marketing measures.
- PR and promoting of tourism sector in general.

67. The Montenegrin Hotel Association (Udruženje hotela Crne Gore), based in Budva, is a smaller association independent of the Montenegro Tourism Association. In 2012 it participated in a campaign to tackle the grey market in the tourism industry.

68. According to the NTO data, there are 13 registered local tour operators bringing tourists from 28 countries and more than 170 travel agencies preparing offers in Montenegro and abroad for both national and foreign tourists and which would need to be educated on the concept of low carbon tourism. During its implementation, the project seeks to organize, in co-operation with the NTO, a specific seminar and/or a campaign with travel fairs and other similar events to conduct this task, while also providing an opportunity for environmental conscious tourism service providers to market their services.

69. Civil Society - NGOs and other civil society groups will be primarily involved in project via national PR campaign and local awareness raising and information dissemination among the tourists and industry stakeholders.

70. New international holiday resort developers, who have experience of low-carbon initiatives, will be invited to engage on such issues as training and eco-certification. Contacts have been established during project preparation with the main investors and developers of the biggest green field tourism development projects in Montenegro such as ORASCOM Development (Lustica Bay Project), Porto Montenegro, Metropol Development (Sv. Marko Island Project) and SOCAR / Kerzner (Kumbor project), who have confirmed their interest in co-operating with the project and in exploring complementary measures to comply with low emission standards for making their investment climate friendly. Further co-operation opportunities with private sector tourism facility owners, investors, transport operators and managers will be actively sought also during the implementation of the project.

71. A more detailed stakeholder involvement plan is presented in Annex 8.4 to this project document.

1.6. Other Related Past, Ongoing and Planned Activities

72. In terms of specific government and donor initiatives aimed at developing the tourism sector in Montenegro, the following projects will constitute the baseline for the proposed GEF project:

Component 1: Legal and regulatory framework supporting low carbon tourism, including increased certification of both existing and new tourist accommodation facilities

73. Most future tourism development in Montenegro will be spurred by green field investments. In total, more than 10,000 hectares of land reserves have been made available for new holiday resorts at different sites, mainly in coastal regions suitable for sun & beach and nautical tourism (see the list of projects and corresponding investment in Table 1.7). Some of the sites – green field and others – are ecologically valuable and require protection and preservation, so the government has rightly decided that they can only be put to limited use. The government is insisting that one of the quality features of all new green field developments shall be a generous ratio of green space per guest/bed for outdoor tourist amenities. The regional master plan for Velika Plaža, for example, provides for 100 square meters of green space per guest with a total of 30,000- 40,000 beds.

Table 1.7: Major green field tourism projects under development or planned in Montenegro (Source MSDT, 2013)

Project	*Investment (Euro, mln)*	*Investor*	*Status*	*Capacities of tourist accommodation*
Porto Montenegro	600	Adriatic Marinas	First phase of the construction works finalized and the marina in operation	100 hotel units (rooms, suits, apartments)
Velika Plaza	6,500	Open for investment	Tender announced	n/a
Ada Bojana	150	Open for investment	It is the intention of the government to enter into a 90-yrs lease agreement. It is expected that the resort will be a flagship project in which the natural surrounding and leisure facilities coexist and complement each other	n/a
Valdanos	150	Open for investment	Tender announced for 30 years old lease	n/a
Kumbor	350	SOCAR, State Oil Company Azerbaijan/Azmont	Investor chosen in June 2012 and the developer of the site (Kerzner) selected in March 2013. Implementation and construction started.	2400 beds (cca 1200 hotels rooms)
Lustica bay	1,000 eur (150 mil EUR in next 4 years)	Orascom Development Ltd.	Construction works started with roads etc. Main construction works are expected to start in 2014.	8 hotels (2200 rooms, 1600 apartments)
Maljevik	500	Sonuba Montenegro	Spatial planning documentation under preparation	80.000 m2 of tourist facilities
Flower Island	200	open for investment	Spatial planning documents adopted	60 hotel rooms
Sv. Marko Island	300	Metropol Group	Planning documentation prepared, design is underway, construction is expected to start in 2015.	60 hotel rooms, 100 bungalows, 70 villas

Kraljicina plaza	71,6	Queens beach development company	spatial planning documents adopted	1156 beds
Hotel Jadran, Ulcinj	45		spatial planning documents adopted	400 beds
Golf complex Tivat	181	Boka Group	spatial planning documents adopted	1200 beds (2 hotels)
Blue horizons Tivat	250	Qatary Diar	spatial planning documents under preparation	660 beds

74. GIZ-ADC-Norwegian Government project "Support to tourist destinations in the central and mountainous regions of Montenegro" (2006 – 2013, 5.1mln US$). The project has supported national and international experts to advise the MSDT on the elimination of regulatory barriers to tourism development and on appropriate legal requirements for new tourism products. At a regional level, the program has sought to facilitate the development of three tourist destinations: Cetinje, Plav and Skadar Lake. At each destination, the program has provided advice, training and subsidies to assist local stakeholders to develop strategies, products and marketing, to improve destination management and to pilot innovative business models. The Wild Beauty Eco Label was a direct result of this multi-donor program.

75. In respect to energy use, the Wild Beauty standard requires that "passive design" techniques and the use of natural lighting, heating, and cooling sources be maximized. The standard also calls for adoption of modern renewable technologies, such as solar panels, windmills, geothermal, micro-hydro, biogas digesters, etc., through "active design" to meet energy needs for water heating, lighting, appliances and cooking. The first Eco-lodge consistent with the Wild Beauty standard is planned to be constructed at the Skadar Lake by a French investor.

76. As a part of the government's low-carbon programme, promoted by MSDT and developed to set an example for the industry, a carbon-neutral regional Tourist Information Office in Biogradska Gora National park has been designed and constructed for the first time in Montenegro following the "passive house" standard (with the assistance from Austrian Government). Also, the ecological "Wild Beauty" Label and Resort Development Handbook was developed with support from GIZ to set up guidelines and standards for hotels wishing to acquire the status of "Wild Beauty Accommodation".

77. Economic development, focusing on sustainable regional development and tourism has been the main focus area of the Austrian Development Cooperation (ADC) Strategy in Montenegro. Specifically, ADC aims at improving regional development planning and implementation capacities in the Northern regions and around the Skadar Lake in line with the Tourism Master Plan 2020. ADC's main objective is to promote regional development with income generation in tourism and closely related economic sectors such as agriculture. A key principle is to contribute to a sustainable tourism infrastructure with particular attention to ecological sustainability.

78. Worth noting are also the NTO's Bed and Bike scheme, now well established, which encourages cycling holidays in Montenegro and which is sold through tour operators and the "Peaks of the Balkans" initiative, which was awarded by a 2013 World Travel and Tourism Council (WTTC) *Tourism for Tomorrow Award*. The latter relates to training of mountain guides, mapping the accommodation and other services for and marketing of trails running from Plav to Kosovo and Albania.

79. One of the problems with all the activities listed above (including the development of the Wild Beauty Standard) as it concerns the environmental impacts of tourism is, however, that they are primarily focusing on the development of the northern/mountainous part of Montenegro, while all the biggest tourism development activities are currently concentrated at the coast.

80. Environmental certification of the Montenegrin tourist accommodation facilities at the coast has been promoted under "TUR.GRATE 2", a EUR 2.5 million European Union (EU) project funded under the Instrument for Pre-Accession Assistance (IPA) Adriatic Cross Border Cooperation Programme. The

National Tourism Organization of Montenegro (NTO) and the Tourism Organization of Bar are partners to this project sharing a budget of EUR 500,000. According to the official EU Flower website[35], there are currently, however, only three EU Eco-label (EU Flower) certified properties in Montenegro. The TUR.GRATE 2 project ended in January 2014, but the promotion of the EU Ecolabel is likely to be continued by the EU Delegation in Montenegro.

81. A study on Solar Energy in the Tourism Sector in Montenegro was finalized in the frame of GIZ supported SOLTHERM project by the Montenegrin Center for Energy Efficiency in December 2011. Another project, namely an ongoing "MONTESOL" project [36] implemented in co-operation with UNEP, the Ministry of Economy and the Italian Ministry of Environment is providing interest free loans for solar thermal installations.

82. The EBRD-Project, to be implemented between June 2013 and May 2014, supports the formulation of an ESCO-enabling legal framework to facilitate cost saving energy efficiency investments in particular in Public Buildings and Public Services. A National Working Group - chaired by the Ministry of Economy - will guide the process. The EBRD-Consultancy Team will provide assistance by analyzing the existing laws (including budget codes and procurement), identifying barriers and proposing amendments based on international experience and adjusted to the national context. In order to implement the approach without delay EBRD will also support the establishing of "ESCO-Project Pipelines" for participating countries and the financing of such projects.

83. UNDP "Beautiful Cetinje" project implemented in 2011 – 2015 deals with economic revitalization of the old royal capital through urban reconstruction of the cultural heritage with energy efficient considerations, thereby contributing to the overall "community greening". Further details about this project are provided in chapter 2.5.

84. Baseline scenario: Despite the general policy statements to support environmentally sustainable tourism, a comprehensive and coherent effort to minimize the carbon footprint of the main tourism development centers and activities in Montenegro is still pending. Attempts to promote environmentally-conscious tourism have so far focused on the mountainous areas, whereas the real challenges are at the coast. In the absence of the project, the legal and regulatory framework for low-carbon tourism is likely to remain patchy without coherent mandatory provisions and requirements for the tourism sector to promote, for instance, low carbon spatial planning and environmental certification of tourism accommodation facilities. With the exemption of a few frontrunners, the progress in both areas will remain slow, also partly resulting from the lack of adequate demand for such certification by the visiting tourists.

Component 2: Low carbon and carbon neutral transport infrastructure

85. The Government vision for the development of the transport sector and some major ongoing and planned infrastructure projects with an impact on also tourism sector related transport planning were discussed in chapter 1.4. Other projects of interest are discussed in further detail below.

86. An updated feasibility study for the construction of a cable car from Kotor to Cetinje was finalized in June 2013 with support of the Central European Initiative (CEI) Fund of the EBRD. EBRD is currently considering a loan in the range of up to EUR 15 million to support a Public-Private Partnership (PPP) with the involvement of Cetinje Municipality, Government of Montenegro and a private investor (still to be selected through an open international tender) to construct and operate the cable car on a Design, Build, Finance, Operate and Transfer ("DBFOT") basis. The total investment has been estimated at up to EUR 50 million depending on the options chosen for the final length and transport capacity of the cable car and will constitute an important part of baseline financing for the proposed project (See letter of co-

[35] http://ec.europa.eu/ecat/

[36] http://www.energetska-efikasnost.me/ee.php?id=24&l=en

financing from the Major of the Royal Capital of Cetinje). Other relevant baseline projects planned by partner municipalities include a) improvement of public transport infrastructure (pedestrian pathways and bicycle lines/parking) in municipality of Tivat (18 mln EURO) and b) construction of new pedestrian pathway (including bridge, parking, etc) connecting old and new parts of the UNESCO world heritage site of Kotor and associated infrastructure (20 mln EURO).

87. The main objective of the cable car project is to increasingly attract visitors from the coast and, in particular, the cruise visitors normally staying in Kotor to Lovcen Natural park and Montenegro's historic capital Cetinje, located uphill behind an 1 – 1 ½ hour car/bus drive. The new cable car would cut the travel time to approximately 45 minutes, while also offering a complementary tourist attraction by itself. The number of passenger using the service has been forecasted at 90,000 – 220,000 passengers per year with an annual operation time of 4-7 months.

88. From the GHG mitigation point of view, the GHG emissions of the cable car project will primarily originate from the electricity generation used for the operation of the cable car, estimated at up to 1,3 – 1,8 million kWhs per year.[37] In the current baseline design, the electricity is envisaged to be purchased from the public grid and thus the specific GHG emissions per kWh consumed would correspond with those of the average emission factor of grid electricity. Alternatively, the electricity could be produced with new complementary RE capacity attached institutionally and financially in one way or another to the cable car project. This will be discussed further in section 2.

89. The Government of Italy has been supporting the development of tourism and travel master plans and pilot projects in a number of important touristic centers and it remains committed to continue its support in these areas with annual grant financing of about EUR 800,000. Past examples of this co-operation are the Perast sustainable transport initiative, in which the municipality of Perast[38], with support of the Italian Government, transformed its main street to an 'eco-tourist zone' restricted to traffic in the summer months. There is parking space outside the city center, where tourists can leave their vehicles and go sightseeing around Perast on foot or using bikes, "segways" and electric cars specifically introduced for this purpose. Another bike-sharing program, "BikeTivat", was launched recently, also with the assistance of the Italian Government, in the coastal city of Tivat. Six docking stations placed in strategic locations along the Tivat promenade are to offer residents and tourists a convenient and environmentally-friendly alternative to explore Tivat.

90. The idea of promoting more effective use of railways, inland waterways and maritime transport, including an increase in the capacity of the ferry-boats in Boka-Kotorska Bay, as a sustainable alternative to road connection and analysis of the possibilities of introducing seasonal ferry line on route Bar – Boka-Kotorska Bay, that would provide similar services of bus traffic, are listed under the Strategic Goal # 5 (Environment) of the Government Transport Development Strategy of 2008. These ideas have not proceeded further, however.

91. It is also to be noted that ferries running on diesel are likely to present a more carbon intensive public transportation mode per passenger km compared, for instance, to public busses, unless longer driving distances around the bay and extra time spent on congested roads play for the favour of the ferries. Nevertheless, an environmentally more attractive alternative would be a ferry or boat service using renewable energy sources such as biodiesel or RE generated electricity. A feasibility study for the "Establishment of Sustainable Maritime Public Transport in Boka Kotorska by Solar Powered Catamarans" was finalized with support of the BAS Programme[39] of the EBRD in 2013, but has not proceeded further since then. The study was done for a complete marine public transportation scheme of Kotor Bay consisting of 2 longer fast lines (with diesel boats) and 5 - 6 solar power assisted shorter ones with a total fleet of 18 boats and estimated investment of EUR 5.3 million.

[37] calculated based on an annual operating time of 4 - 7 months and 10 hours per day.

[38] a small historic town of 350 people at the Kotor Bay and an UNESCO World Heritage Site

[39] http://www.ebrd.com/pages/workingwithus/sbs/how/bas.shtml

92. Adria. MOVE IT is a EUR 1.8 million project financed by EU-IPA funding "to promote sustainable mobility for improvement of quality of life in the Adriatic area and greater efficiency and safety of traffic. The specific objectives are improvement of mobility and accessibility through more sustainable transport solutions and increased quality and attractiveness of public transport". The project was initiated by the City of Dubrovnik (Croatia), Municipality of Piran (Slovenia) and Municipality of Kotor (Montenegro) and joined later by the Cities of Umag and Novi grad and the Municipality of Lopar in Croatia. The key activities are envisaged to result in preparation of Local Sustainable Mobility Plans. Small investments (bike racks, logistic platforms, cycle paths, bus stops) will also be supported to kick-start the implementation of the Sustainable Mobility Plans, complemented by activities such as improvement of local transport policies and re-organization of transport decision making groups, coordination with public transport concessionaries on public transport re-arrangement and implementation of intelligent urban transport solutions (car-sharing, park&ride system,…).[40] Kotor is currently in the process of updating its Spatial Plan with expected finalization of the draft by the end 2013 and adoption by mid 2014.

93. EU IPA-2: IPA Project title: Developing sustainable energy use. Contracting Authority: Delegation of the European Union to Montenegro. EU contribution: EUR 800,000. The expected main results of the project related to the sustainable energy use in the transport sector include:

- assessment of the renewable energy (RE) and energy efficiency (EE) potential and finalization of an action plan with priority measures for sustainable use of energy in transport sector prepared;
- further development of the legal and regulatory framework for promoting RE and EE in the transport sector;
- Establishment of a monitoring and reporting system for energy consumption in the transport sector in compliance with the statistical and monitoring system of EUROSTAT;
- An energy management monitoring schemes for transport sector developed and implementation started.

94. The UNEP/GEF project "Stabilizing Greenhouse Gas (GHG) Emissions from Road Transport Through Doubling of Global Vehicle Fuel Economy: Regional Implementation of the Global Fuel Economy Initiative (GFEI)" was approved for implementation in October 2013 with the goal to support the development of national fuel economy policies in 20 countries, including Montenegro. Co-operation opportunities with the mentioned initiative will be further explored at the project inception phase.

95. Baseline scenario: The already finalized or ongoing sustainable transport initiatives not effectively replicated. New transport initiatives such as the Kotor–Cetinje cable car and increased marine transport not necessarily developed as low/zero carbon initiatives. Spatial and transport planning at the central Government and municipal levels not adequately taking into account climate change mitigation goals.

Component 3: A permanent financing mechanism to support climate change mitigation and adaptation

96. In June 2008, the Montenegrin Government introduced a countrywide eco-tax on foreign vehicles at border crossings entering Montenegro. The main objective was to discourage the private car travel by visiting tourists, while also raising funds for research and programmes to address concerns about the ecological footprint of automobile travel, as well as to promote more environmentally friendly public transport. During 2008 alone, the eco-tax generated over EUR 6.5 million in revenue – with the tax ranging from EUR 10 to 150 depending on the size of the vehicle. Private cars and vans paid EUR 10 as a one-time fee allowing multiple crossings during one calendar year.

97. As of January 2012, the collection of eco-taxes was halted due to the need to harmonize the taxation system of Montenegro with the Stabilization and Association Agreement between Montenegro and the

[40] http://my-europa.eu/index.php?option=com_community&view=groups&task=viewgroup&groupid=403&Itemid=25

European Union and the European Union Directive on charging the heavy duty vehicles for the use of certain infrastructures. This had major implications on the financing of sustainable tourism as the eco-tax revenues used to provide up to 30% of the total government spending on sustainable tourism. As of today, there is no financial scheme or mechanism in place, which would stimulate more climate conscious behaviour of the tourists and allow the government to accumulate financial means to mitigate the environmental consequences of tourism industry, including its impact on GHG emissions. In establishing such a new scheme, due attention needs to be placed on transparency on how the collected funds will be spent. The lack of such transparency was one of the points of criticism of the old scheme, which also undermined its credibility.

98. Baseline scenario: Establishment of the National Climate Fund planned, but not necessarily realized. Also no mechanisms in place to re-invest the proceeds in climate change mitigation actions in tourism sector.

Component 4: GHG emission monitoring of the tourism sector and increased public awareness about the sector's carbon footprint, GHG reduction potential and measures

99. In 2008, the National Tourism Organisation (NTO) of Montenegro with assistance of GIZ launched the new tourism brand of Montenegro "Wild Beauty: Eco by Nature", including high-profile advertising campaigns on TV channels such as CNN, in trade and consumer media. The Ministry of Tourism and Environmental Protection, the Employment Bureau of Montenegro and numerous partners launched the 'Keep it Clean' campaign in mid-2000s, supporting public works related to the cleaning of primary and regional roadways in all major municipalities. As one of the activities, 650,000 trees were planted countrywide as a first step towards raising awareness of local residents and tourists on the importance of climate change mitigation and the actions, which can be taken to combat it.

100. Baseline scenario: PR activities and campaigns to promote Montenegro as an ecofriendly tourist destination will be continued as planned, but not necessarily addressing the carbon mitigation opportunities. No ongoing or planned activities to introduce a more rigorous GHG monitoring and accounting program apart from the EU IPA-2 project addressing the transport sector.

2. PROJECT STRATEGY

2.1. Project Objective, Outcomes and Outputs[41]

101. The project seeks to adopt a comprehensive approach to minimizing the carbon footprint of Montenegro's main and most dynamic economic sector, the tourism sector. Building on a review of the international experiences and best practices it will promote country's transition towards a carbon neutral travel & tourism by facilitating development of supporting low-carbon policies and helping the tourism industry to identify and implement cost-effective mitigation options in travel and accommodation sectors, including minimizing the energy use and transport in and around new green field development projects. It also seeks to introduce carbon offset schemes and other innovative financial mechanisms, including the establishment of the National Tourism Climate Fund (NTCF), to compensate for the residual emissions and to generate additional revenues for financing of climate change mitigation and adaptation actions in travel and tourism.

102. The project will constitute of four components and related outcomes. The incrementality of each component has been initially discussed in chapter 1.6 in the context of selected baseline projects and will be further elaborated below.

Outcome 1: Legal and regulatory framework supporting low carbon tourism and low carbon spatial planning, including increased certification of both existing and new tourist accommodation facilities and related services by internationally recognized environmental certification scheme(s).

103. This component is driven by a target to strengthen the legal and regulatory framework for advancing low carbon tourism offer in Montenegro and to get an increasing number of both existing and new tourist accomodation facilities certified for their environmental performance and, when applicable, to support the facility owners to further develop their facilities as entirely carbon neutral. The target by the end of the project is to have:

- Revisions in the key strategic documents such as the Montenegro's Tourism Development Strategy to 2020 and the Transport Development Strategy of Montenegro (2008) with due attention on low carbon tourism;
- Revisions in the Law on Tourism and the related rulebooks such as the "Rulebook on classification and minimum standards for categorization of the accommodation facilities" and the Law on Spatial Planning and Construction of Buildings together with the associated rulebooks on more detailed content and form of a planning document, land use criteria and urban regulation elements related to sustainable and low carbon behavior. Revisions will mainly be driven by direct project results, such as investment pilot projects under component 3, which will point at eventual areas for improvement in current legislation ;
- Enhanced capacity of the National SD council and relevant line ministries to further develop supportive policies and advance otherwise the low carbon tourism offer in Montenegro;
- Enhanced capacity of the relevant government and municipal authorities to effectively implement, monitor and enforce the adopted regulations;
- Specific regulations for mandatory low carbon certification of hotels, including a roadmap for its gradual introduction with targets and gradual stringency of the requirements;
- At least 33% of all registered collective tourist accomodation facilities in Montenegro certified in accordance with the EU Ecolabel[42] or similar internationally recognized certification scheme and 25% of those to operate on a fully carbon neutral basis by the end of the project; and

[41] The project strategy is presented by a logical framework approach. The essence of this approach is that outputs are clustered by outcomes, which together will achieve the project objective. These are discussed briefly in section 2.1 with further details provided in Section 3, "Project Results Framework".

[42] Further details about the energy saving, greenhouse gas reduction and environmental criteria for obtaining an EU Ecolabel

- At least 100 private (non-collective) accomodation facilities ecocertified by the end of the project and 25 of them working on a fully carbon neutral basis.

104. The majority of GHG emissions from tourist accomodation facilities and services is resulting from their energy use. As such, the most effective measures for reducing the emissions are to improve the energy efficiency of those facilities and to increase the share of energy produced by renewable energy sources. Examples of such measures, which can also be justified by their direct cost saving benefits are:

- improved insulation of the building envelope to reduce both the heating and cooling needs. For new buildings also by taking into account the siting, orientation, natural ventilation and shadowing. While space heating is not a matter of concern at the coastal areas during the holiday season, energy consumption for space cooling is constantly growing due to the inreasing requirements for comfort;
- purchasing and using energy consuming appliances of the highest energy efficiency category for air-conditioning, lighting, food refrigeration and cooking, dish and clothes washing and ICT (information and communication technology), labelled in accordance with the EU labeling scheme[43] already adopted for the majority appliances used also in the tourism industry;
- automation to switch off the lights, air-conditioning and other energy consuming appliances when the rooms are not occupied or when not needed otherwise (e.g automatic switching off the air-conditioning, when opening the window);
- covering heated swimming pools when not in use, for instance, during the night reducing heat losses and evaporation;
- reducing water consumption by low flow shower heads and other water saving plumbing fixtures;
- increasing on-site renewable energy production such as solar water heating and solar PV electicity generation. As illustrated in chapter 1.3, the costs of roof-top PV systems, in particular, have been rapidly decreasing during the past few years and may create opportunities for some extra revenues also during the off-season with a possibility to sell any excess electrity to the grid with a premium feed-in tariff;
- improved waste management and segregation, eventually connected with biogas production;
- frequent maintenance and cleaning of the energy consuming and generating devices in use;
- facilitating an easy access to low and no carbon transport options, such as bicycles, environmentally friendly shuttle busses and other public transportation; and
- last, but not least, enhanced awareness and training of the managers, staff and visitors on energy efficient operation and management of the premises and introduction of related incentives to motivate such behaviour.

can be foundfromhttp://ec.europa.eu/environment/ecolabel/documents/hotels.pdf

[43] http://ec.europa.eu/energy/efficiency/labelling/labelling_en.htm

Text Box 1: Example of a green field tourism development project: Sv. Marko Island
Within State Location Study for St Marko Island near Tivat (Kotor Bay) it is planned to build 8ha of luxury tourism&resort facilities on the island of an area of 180 ha. Number of guests will be around 830 connected to 168 000 m^2 of green areas and 85 000m^2 of open public spaces. Apart from buildings, residential accommodation, retail areas and other resort facilities (80,000 m^2), the project also will build the following infrastructure:

- roads and procurement of electric vehicles for internal traffic on the island;
- desalination plant;
- power plant;
- heat and hot water supply system;
- telecommunication equipment and infrastructure;
- facilities and garbage management/recycling system;
- water taxi and ferry for connection with mainland.

105. Beside meeting the minimum energy efficiency and renewable energy requirements contributing directly to GHG emission reduction, environmental certification typically includes a number of other criteria, with which the applicants need to comply in order to receive the certification. As such, it does not make sense to focus on energy related aspects alone, but the project, in co-operation with the key local stakeholders such as the MSDT, NTO, Montenegro Hotel Association and municipal tourist offices, seeks to establish an on-line "one stop" advisory and support center to motivate and help the owners and managers of the tourist accomodation facilities to:

- understand and apply the required criteria for obtaining an environmental certificate (or go beyond those criteria, when feasible);
- identify and assess the feasibility of different measures, including initial energy and environmental audits;
- implement the selected measures by shortlisting qualified designers, installers and equipment suppliers with associated training (as needed) and follow up for quality control;
- quantify and monitor the resulting GHG reduction and environmental performance of the premises;
- improve environmental and energy management in general, including implementation of carbon offset schemes, when applicable; and
- enhance the visibility and obtain a marketing edge for their facilities on the basis of improved environmental and energy performance and related environmental certification.

106. Besides and by building on the first steps supported by the TUR.GRATE 2 project, the project will train local auditors for the certification scheme in order to reduce the need (and related costs) for getting auditors from abroad.

107. The environmental certification is initially planned to be promoted as a voluntary measure by motivating the owners and managers of the tourist accomodation facilities and related services by:

- raising their awareness on the simultaneous cost saving benefits and other win-win opportunities;
- providing financial incentives for the forerunners by sharing the initial certitication and auditing costs, including co-operation with the EBRD funded ESCO project[44]; and
- providing specific visibility and marketing support for eco-certified facilities through the local and national tourist organisations(to be addressed under outcome 4).

[44] See chapter 1.7 for further details

108. In a due course, certication of all registered tourist accomodation facilities for their environmental performance will be made mandatory and included in one way or another into the current quality classification system. The project is supporting this by reviewing the current legislative and regulatory framework, drafting suggestions for the required amendments and developing a road map for moving from voluntary to mandatory certification scheme by the end of the project. Beside mandatory measures, the suggestions may also include specific financial and fiscal incentives to support initial or complementary voluntary action.

109. Given the multisectoral nature of the tourism sector related services, all efforts and new initiatives at the legal and regulatory front need to be closely co-ordinated with the other sectoral reforms, including those to promote the certification of buildings' energy performance in general.

110. In parallel to "greening" the tourist accomodation facilities and new tourist resorts by the private sector, local municipalities would need to signal their commitment by actions taken in public buildings, spaces and services, thereby contributing into the low carbon community development and promotion in a broader sense. Exampes of such projects are:

- energy efficiency retrofits of public buildings;
- solar water heating and PV installations in public buildings and spaces such as public showers and pools, sport centers, hospitals, kindergartens, tourist information centers and marinas;
- energy efficient lighting of cultural and tourist sites and monuments (incl. street lighting); and
- low carbon local and intercity transport development

111. Urban and spatial planning is of the same importance for the energy savings of buildings as the building design itself. In order to improve energy efficiency of settlement or future touristic resorts, project will encourage development of low carbon spatial plans, which will have to fulfill a set of criteria related to CO_2 emissions, efficiency, functionality, health, economy and aestetics. Spatial plan which aims to be low-carbon plan has to predict impact of surrounding spaces and buildings on atmosphere and effects of modifications of climate elements, in a way that will encourage favorable climatic caracteristics of locations and eliminate or reduce impact of unfavourable ones. Project will contribute to development of at least one low carbon spatial plan in Boka bay , where emphasis will be given to issues of orientation and positioning of buildings, proper regulation of building height taking into account the exposure to sun of the neighboring buildings, exposure to wind, proper planning of green spaces, urban density, energy efficient infrastructural systems, use of renewable energy sources for public services, providing space for development of sustainable transport modalities etc . If feasible, location of selected low carbon plan/s will be defined in accordance with selected projects for investment support under component 3. In this way, spatial planning will be used as a tool for testing effects of low carbon pilot projects on local community already in design stage and a mean for enabling its possible upscaling.

112. In order to be able to develop low carbon urban plans, architects and urbanists have to be familiar with urban and building climatology, building physics, CO_2 emissions from different urban structures and to be informed about local climate, geographical, pedological and geological characteristics. Therefore, the project may support the development of low carbon urban planning manual, software and guidelines by building on the review of international experiences and "good practices" as well as pilot studies and/or low carbon community development strategies and action plans in selected community(ies), thereby proving a model for replication and a basis for prioritizing projects for possible investment support under component 3.

113. To support this as well as building retrofits and new energy efficient design of the private tourist accomodation facilities, training and other capacity buildings of urban planners, arhitects and installers are foreseen to be included among the project activities. Further co-operation opportunities with the Montenegrin Center of Energy Efficiency, the Montenegro Green Building Association and the EBRD ESCO initiative will also be explored in this context.

Outcome 2: Improved low carbon and carbon neutral transport infrastructure to support tourism sector related public and non-motorized transport

114. Component 2 will promote low carbon transport options for meeting tourism sector transportation needs, addressing both cross-border international travel and local transportation. It will build on the ongoing and planned new infrastructure projects and public transportation schemes and looks for opportunities, where their carbon footprint can be reduced or compensated by other means.

115. For international cross border travel, the main areas to be worked with include the following:

- Encouraging and supporting the Montenegrin airports to join the international Airport Carbon Accreditation scheme[45];
- Identification of synergies and co-operation opportunities with the UNDP/GEF global "Transforming the global aviation sector: Emissions Reductions from International Aviation" project;
- Encouraging Port Kotor to become a low carbon cruise liner terminal and Kotor and Boka Bays to become a low carbon shipping corridor, while also raising the awareness of the cruise passengers and yacht owners on the opportunities to reduce the environmental impacts of marine transportation in general;
- As a part of the above, reducing the GHG emissions of the visiting cruisers and yachts by connecting the vessels to the public electricity grid when staying at ports and marinas and adding new RE capacity for required electricity generation[46];
- In co-operation with the ŽPCG, further developing their offer and marketing of rail travel within the overall low carbon tourism offer of Montenegro; and
- Public awareness-raising on the carbon footprint of different transport modes and further development of the related web-based calculation tools and carbon offset offers.

116. In the area of local transport, the project will, beside preparing policy recommendations on sustainable transport under component 1, promote several flagship projects to demonstrate the social, environmental and economic benefits of climate change mitigation in tourism and strengthen the brand of Montenegro as an eco- and climate friendly holiday destination. These activities are envisaged to include:

- In co-operation with the municipalities and private transport service providers (incl. tour operators) in the Kotor Bay area, developing a regional integrated, intermodal low carbon sustainable transport management and development strategy and action plan[47] to be connected with the municipal spatial plans currently being updated;
- In the context of the big new greenfield tourism development projects such as Lustica, Kumbor, Sv. Marko Island, Velika Plaza and Ada Bojana resorts, study and promote the use of carbon neutral transport options for meeting the resorts' internal and outside transportation needs;
- Exploring and promoting low and no-carbon opportunities in the context of new public transport initiatives such as the planned Kotor – Cetinje cable car to become entirely RE driven[48], new solar-electric or hybrid intercity boat and ferry service in the Kotor Bay, increased use of electric shuttle busses, biogas and/or biodiesel etc.;

[45] http://www.airportcarbonaccreditation.org

[46] options for covering the electricity needs of airports by onsite power generation such as PV (typically a lot of possible siting options for PV at airports) could also be explored here as a part of airport carbon accreditation.

[47] Beside spatial planning, addressing issues such as co-ordinated and, as applicable, integrated ticketing, scheduling, booking and fare policy, specific promotions and other marketing e.g. in the context of specific tourist cards , possible financial and/or fiscal incentives to the transport operators for fleet upgrading etc.

[48] When taken into account early enough in the initial design, the roofs of the cable car stations, pylons etc. can be used in a

- Exploring and promoting low and no-carbon opportunities in greening the existing bus fleet of the tour operators and shuttle busses and those used for regular intercity travel. Also study the opportunities for improving the attractiveness of public bus transport in general (to be included into transport management plan) by improved routing, scheduling, ticket and fare policy;
- In co-operation with the local tourism offices, private transport operators and facility managers, developing intemodal transport hubs (bus and railway stations, airports, ports and yacht marinas, possible future cable car stations etc.) as low carbon welcome centers, including at least 2 bus stations in two different cities as per the output 2.3, informing the visitors about the available services in the region, helping with bookings and further travel connections with a particular focus on promoting and raising the visitors' awareness on low carbon transport options; and
- Promoting non-motorized transport (e.g. a green route around the Kotor Bay and along the Adriatic coast) by improved walking ways and cycle lanes, traffic calming and pedestrianisation, low or no cost bike lending services, further developing the "biking and hiking" and "bike and bed" tourism offers and improving opportunies for accompanied bike transport in trains, ferries and busses for longer intercity travel (inclunding, as applicable, an accompanied bike transport option in the planned new cable car between Kotor and Cetinje). Included among the project targets is to construct at least 25 km of new non-motorized transport corridors (walking and cycle lanes) around the Kotor Bay and along the coast with completed design (with a linkage to the spatial planning related activities of component 1) and approved for funding, combined with improved bike transport services for longer intercity trips.

117. The envisaged GEF funding to support these activities will consist of technical assistance in the form of cost-sharing of public awareness raising and training, finalisation of feasibility studies and marketing support as well as of cost-sharing of selected investment based on the criteria elaborated in further detail in component 3. Especially in Kotor, the co-operation opportunities with the ongoing EU-IPA supported "Adria.MOVE IT" project (see chapter 1.7) will also be explored further.

Outcome 3: Pilot investment projects to support low carbon tourism development implemented, followed up by the establishment of a sustainable financing mechanism to support climate change mitigation and adaptation actions in the tourism sector

118. Component 3 aims at mobilizing additional financial resources for climate mitigation activities in the tourism sector. The initial project support under this component will focus on pilot projects selected by a public call for proposals in accordance with the criteria elaborated below, followed by the establishment of a National Tourism Climate Fund (NTCF) as a specific account with the Ministry of Finance and managed by the MDST to collect proceeds from new compulsory and voluntary charges on carbon emissions and re-invest them in climate mitigation and adaptation projects in the tourism sector.

119. The GEF grant funding earmarked for investments in component 3 will be used to test and provide replicable examples on the type of GHG mitigation projects that can be later supported through the NTCF. In order to ensure effective implementation and maximum visibility, while also complying with the UNDP administrative rules for investment grants, the draft criteria for the use of the GEF funds is proposed to include the following:

- the recipient of the GEF grant investment support has to be a public sector entity or a NGO. Also cost-sharing of the equity share of the participating public sector entity in a public-private partnerships is considered as eligible;
- While the NTCF may later support also adaptation projects, the GEF grant financing in the frame of this project is reserved for climate change mitigation actions only, whereas mitigation project with ancillary adaptation benefits will be additionally encouraged;

cost effective way to support the installation of the preferred RE options

- Projects presenting a carbon neutral alternative to the current baseline and benefitting the tourism sector or low carbon community development in public places visited by the tourists are considered as eligible. Examples of such projects are:
  - substituting the use of fuel oil, LPG or grid electricity by RE based energy generation or by combination of EE and RE measures, resulting in a carbon neutral alternative for meeting the energy needs of buildings or other parts of the built environment serving the tourism sector;
  - promoting non-motorized transport or substituting the use fossil fuels in public transport by renewable energy such as solar PV and biofuels (e.g biodiesel); and
  - sequestering CO_2 by carbon sinks (up to the combined share of 20% of all available GEF grant resources for investments).
- GEF cost sharing can only be provided for that part of the investment, which is directly contributing to CO_2 mitigation. For this part, the amount of GEF cost-sharing shall not exceed EUR 200,000, 25% of the total investment or EUR 10 per estimated ton of CO_2 reduced during the lifetime of the project, whichever comes first[49];
- geographically the focus will be at the coastal areas visited by the majority tourists, but investments also in other parts of Montenegro are considered as eligible up to the combined share of 20% of all available GEF grant resources for investments; and
- For monitoring and verifying the resulting GHG reductions, all projects supported by GEF funding need to have an approved MRV system in place similar to those required from small scale CDM projects
- Projects must comply with all relevant requirements of Montenegrin and EU legislation, in particular have positive results of Environmental Impact Assessment (EIA), if its application is mandated by the Law.

120. For the capitalization of the NTCF, a more detailed feasibility study and impact assessment[50]will be completed at the beginning of the project on the different financial and fiscal measures to encourage low and no carbon tourism sector development, while also collecting proceeds for the use of the NTCF. Options considered so far include:

- Introduction of new "EU-harmonized" eco-taxation/ levies on carbon intensive tourism activities to replace the former eco-tax on vehicles abandoned in January 2012[51];
- Compulsory or voluntary carbon offset charges[52] for cruise liners, motor yachts, airlines, local and international travel agencies and/or tour operators designed to favour vessels, vehicles and transport modes with lower emissions;
- Compulsory carbon offset charges for the owners of non eco-certified tourist accommodation facilities to compensate for GHG emission exceeding the EE and RE criteria of eco-certification;
- Voluntary carbon offset schemes for all facilities to compensate for any residual GHG emissions;
- Voluntary carbon offset schemes for climate conscious individual visitors connected to the marketing and booking systems of travel agencies, tour operators, airline and cruise companies, booking systems for accommodation etc.; and

[49] As an alternative to up-front investment grants, the GEF grant support may also be provided through performance based grants and/or agreed risk sharing depending on the project type and requirements. To the extent possible, different models will be tested with the pilot projects and the results used for further formulation of the operational procedures of the NTCF.

[50] also taking into account possible conflicts with the EU acquis

[51] For further details, see chapter 1.7

[52] where a carbon offset credit of one ton equates to one ton of emissions reduced or averted through reinvesting the collected funds to carbon mitigation projects elsewhere;

- Fund-raising through corporates' environmental and social responsibility programs, as well as social crowd-funding platforms.

121. For any voluntary carbon offset schemes, it is considered as important to provide also domestic and international, for instance, NGO based alternatives to the NTCF in order to allow the visitors to choose between different options and type of investments to be supported. For the credibility of any scheme, the transparency of its financial management and operations (including the administrative costs) and that the funds will be reinvested in projects having a real, objectively verifiable carbon mitigation impact will be of utmost importance. Particular attention will be paid to these aspects, when developing and supporting the NTCF or any other carbon offset scheme in the frame of the GEF project.

122. Based on the results of the pilot investments, the project will help to prepare a replication strategy, investment plan and MRV system for follow-up projects to be implemented with financing from the NTCF. Training and other capacity building of the NTCF staff will also be supported.

Outcome 4: GHG emission monitoring system and increased public awareness about the carbon footprint of the tourism sector, its GHG reduction potential and measures

123. The outcome of this component will be two-fold. First, it will provide an accurate Monitoring, Verification and Reporting (MRV) system for GHG emissions from tourism sector related activities and thus provide the essential knowledge and data for estimating the carbon footprint of the sector and different type of tourist activities and services. Currently, there is no such system in place in Montenegro: National GHG inventory does not cover tourism as a separate energy end-use sector, neither there are estimates of the transport-related GHG emissions from tourism activities. For the establishment of such a system, a working group consisting of representatives of MONSTAT, Environmental Protection Agency, Montenegro Hotel Association and the entity selected to become responsible for monitoring the energy and environmental performance of eco-certified facilities (if different from the ones mentioned before) is foreseen to be established at the outset of project operations with detailed elaboration of the data requirements, current availability and further development needs. Co-ordination is also essential for minimizing the overlapping reporting needs and for improving the quality of data.

124. GHG emission baseline and a Monitoring, Reporting and Verification (MRV) system are essential building blocks and prerequisites for introducing carbon offset schemes and other financing mechanisms, such as credited NAMAs. Specific activities to be supported by the project will include the development of a methodology for GHG emission accounting and baseline setting in the tourism sector, development of a national reference baseline for GHG emissions from the tourism sector and its sub-sectors (transport, buildings and waste), as well as guidelines for developing and setting up MRV protocols and systems for projects submitted for funding by the GEF, NTCF or voluntary carbon offset schemes. Examples of carbon accounting and reporting systems such as "CEMAsys" will be further explored during project implementation.

125. Secondly, the project will use the data compiled and analyzed under component 4 as well as the results of the pilot projects (Component 3) to raise awareness about tourism sector's GHG emissions and potential reduction measures among the key tourism industry stakeholders and their clients. It will provide advice for and support the NTO, municipal and private tourism industry associations to develop and launch new mechanisms, products and specific promotional campaigns to support low and no carbon tourism such as:

- web-based carbon footprint calculators and low carbon booking systems providing priority access to and/or specific visibility, logos and filtering systems for low carbon tourism offers for accommodation, transport and catering services[53];

[53] The NTO website also to be upgraded in this context

- increased consumer awareness and transparency by indicating emissions on transport tickets and product brochures and create a standard for carbon footprint labelling on all tourism products, like transport tickets, accommodations, activities and packages;
- "Green footprint" tourist welcome cards, which could be given, for instance, in return to visitors paying a voluntary carbon offset fee and including rebates or free use of local public transportation and bike lending services, rebates for "eco-labelled" accommodation, shops and restaurants[54] etc.
- Green (carbon neutral) meetings, green guest loyalty programs and promotion of "Leave no Trace" tourism; and
- "Green Track" rail travel

126. Among the first activities under this component, the project will develop a PR strategy and plan for low-carbon tourism in Montenegro, where all the ideas above can be systematized, prioritized and responsibilities defined in terms of who does what. The preparation of the strategy will also provide an opportunity to involve other partners in the PR.

127. The PR campaign to be implemented after the strategy preparation will build on the on-going efforts by the MSDT and NTO to promote Montenegro as an eco-friendly holiday destination, but with a specific focus on climate change mitigation.

128. In order to monitor the impact of the project activities and supporting PR work, three studies (one at beginning, one at the mid-point and one at the end) will be launched to study the actual use of those services in the accommodation and transport sectors in Montenegro, which are classified as "low or no carbon". Beside receiving information (annual user statistics) from the providers of these services, the studies will include surveys on the level of awareness, perception/ preference of the visiting tourists on these services and Montenegro as a low carbon tourist destination in general. The type of services, the use of which will be monitored throughout the project implementation are, among others, the availability and use of eco-certified tourist accommodation facilities, the use of available low/no carbon transport services such as non-motorized transport, rail-service, low-carbon road transport etc. The exact content of the surveys and a list of key stakeholders to be engaged into this work will be further clarified and agreed upon at the project inception phase. These study will also serve as important element of the project Monitoring and Evaluation framework.

129. *In all its PR and outreach activities, the project will adhere strictly to the GEF Communication and Visibility Policy. This will include, inter alia, the compulsory use of the GEF logo on all material, publications, websites, display panels, promotional items, photographs, audiovisual productions, public events and visits and information campaigns targeting tourists and other stakeholders.*

2.2. Project indicators, Risks and Assumptions

130. In accordance with the GEF's Focal Area Objective #4 to "Promote Energy Efficient, Low-Carbon Transport and Urban Systems", the key success indicators of the project are:

- Number of cities (or touristic sites in this case) adopting sustainable transport and urban policies and regulations;[55]
- Volume of investment mobilized; and
- Tonnes of CO2 equivalent avoided.

[54] the criteria still to be developed for this

[55] relying on existing state strategies, laws, and local networks, willing to establish Low Carbon Communities. Common EU practice is to act locally like in Catalonia, http://www.diba.cat/web/xarxasost/desgel)

131. For further details about the related targets, see the project's results framework in Section 3 and Climate Change Mitigation Tracking tool (provided separately).

132. The main identified risks to the successful implementation of the project include (see also Annex 8.1 for description of risks and responses):

Political -Lack of political will to adopt required legal and regulatory changes and/or effectively implement the adopted policies and strategic goals to promote cross-sectoral low-carbon tourism sector development in a co-ordinated manner;

Technology -Technical failures of the promoted technologies and measures leading to the loss of trust by targeted investors and clients;

Financial-Due to budget constraints, the Government reduces the funds available for low-carbon tourism development.

Financial- Resulting from a weak financial situation, lack of investment capacity and/or creditworthiness of the targeted private sector;

Environmental - Climate risk to tourism infrastructure;

Organisational -Lack of adequate co-ordination and co-operation on the different sectoral policies, strategies and initiatives within and between the central government, local administration and private sector entities to effectively reach the stated goals;

Operational -Inadequate and/or non-capacitated human resources to successfully implement the project and support the mainstreaming of its results.

133. An important aspect to keep in mind when developing and marketing low carbon tourism is to avoid "green washing" i.e. to develop and use in marketing low carbon offers that in reality have only a marginal or, in the worst case, no impact at all. Therefore, focusing on measures that really matter and making sure that they are also implemented according to the plan (including the need to get a credible and transparent enforcement and verification mechanism in place for any legal and regulatory measures) will be critical for any low carbon tourism development strategy. For attracting environmentally conscious visitors, the credibility of the country as a truly low carbon destination is essential to maintain and will have a crucial impact on the sustainability of the services offered.

134. This is important to consider also in the timing of actions: Awareness building of tourists about Montenegro as a low carbon destination option should only kick in, once real visible measures in an adequate amount such as better low carbon public transportation services, more cycle routes, carbon accredited airports and marinas, minimum of 33 % of eco-certified tourist accommodation facilities and a greater share of on-site small decentralized renewable energy generation have been implemented. Otherwise, the efforts are at a great risk of losing their credibility and seen as ungrounded "green wash".

135. The risks associated with inadequate engagement of the private sector in early consultations, strategy formulation and implementation have been discussed already earlier in this document (chapter 1.6), so a reference for further details is made to there.

136. A typical risk for different training and capacity building activities is that after the completion of training, there will be no real demand for the services of the trained experts. The integrated approach adopted by the project is expected to mitigate this risk by combining the training with concrete possibilities to apply the new skills in practice for the planned pilot projects and their envisaged replication.

137. For addressing the operational project management risks, a committed, full-time project manager with adequate outreach and networking skills is absolutely essential for the success of the project. He/she should have an ability: i) to engage the key stakeholders into constructive discussion about future development of sustainable tourism in Montenegro; ii) to guide and supervise the studies done

and effectively co-operate with the international experts who are engaged to support this work; iii) to present their findings and recommendations in a convincing manner to key policy-makers and opinion leaders by taking into account the main macroeconomic and policy drivers for the development of local tourism industry; and iv) to identify areas of future work. During the project implementation, the project manager also needs to be supported by qualified national and international technical, PR and legal experts.

138. Further details on these risks, with their probability and impact analysis and related mitigation measures, are presented in the "Offline Risk Log" in Annex 8-1.

2.3. Expected Global, National and Local Benefits

139. The calculated global GHG reduction benefits of the project will consist of the combination of:

- Direct GHG emission reduction benefits from the pilot/demonstration projects implemented in the framework of the project and supported by project funding;
- Indirect GHG reduction benefits resulting from broader market transformation arising from project activities.

140. No post-project GHG emission reduction benefits arising from ongoing operation of financing mechanisms established or supported by the project have been accounted in this project, as the GEF cash contribution to capital investments represents a one-time capital grant without expected pay-back.

141. The direct GHG reduction benefits of the project have been estimated at 77 kilotons of CO_{2eq}, resulting from the investments supported directly with GEF grant funding during the lifetime of the project and calculated over 20 years default lifetime of the investments.

142. Additional indirect mitigation benefits can be expected from sustained market growth of low and no carbon tourism in Montenegro after the project at the estimated amount of 174 kilotons of cumulative CO_{2eq} reduction compared to the projected baseline by 2023 and over 360 kilotons cumulative CO_{2eq} reduction compared by 2029 i.e. 10 years after the expected end of the project.

143. The associated national and local benefits include reduced local pollution from the burning of fossil fuels and strengthened national energy security through reduced dependency on imported fuels.

144. Tourism sector is projected to account for over 30% of Montenegrin GDP and 50% of national capital investment by 2020. By helping to develop tourism in a sustainable and low-carbon way, the project will deliver strong socio-economic benefits to the whole country. It will improve competitiveness of its main economic sector by developing unique tourist product and market image thus helping the country to retain its position as a global tourism leader, raise revenues for local and national budgets, as well as to create and sustain 25,000 jobs directly and over 60,000 indirectly, including over 50% for women.[56]

2.4. Project Rationale and GEF Policy Conformity

145. The project is contributing to GEF Climate Change Focal Area Objective #4 to ""Promote Energy Efficient, Low-Carbon Transport and Urban Systems", recognizing that:

- "although the focus of this objective in GEF-5 will remain on transport, given the critical importance of integrated approaches to attain maximum global environmental benefits, the expanded scope will attempt to address urban systems as a whole where appropriate"
- "options for intervention during GEF-5 will include land use and transport planning, public transit systems, energy efficiency improvement of the fleet, efficient traffic control and management, transport demand management, and non-motorized transport. Technological options in the

[56] http://www.wttc.org/research/economic-impact-research/country-reports/m/montenegro/

transport sector, such as promoting clean, low-carbon vehicles, may be considered in countries where significant GHG emissions reduction as well as local development and environmental benefits can be achieved. Public awareness and participation will be an integral part of a successful program. Through comprehensive, integrated intervention, GEF projects will address not only climate change mitigation but also local air pollution, traffic congestion, and access to affordable and efficient transport and public utilities."

- "Strong commitments from the local as well as the national governments are particularly important. At the city-level, emphasis will be placed on integrated low-carbon urban planning for transport, energy efficiency, and renewable energy, covering housing, transport, public utilities and commercial development. Comprehensive interventions through integration of transport, energy, water, and housing sector activities will be encouraged. GEF support under this objective will involve technical assistance in transport and urban planning, development of innovative financing mechanisms, awareness campaigns, and investments in high-performance technologies. During GEF-5, greater attention will be given to measuring and quantifying global environmental benefits, which will provide a basis for choosing the best sets of interventions to deliver maximum global and local benefits."

146. The project will support policy, regulatory and financing framework for investment in sustainable urban systems, with a particular focus on the areas with high concentration of and potential for tourism activities.

147. The specific outcomes of the GEF V climate change strategy that the project is addressing include:

- Sustainable transport and urban policy and regulatory frameworks adopted and implemented;
- Increased investment in less-GHG intensive transport and urban systems; and
- GHG emissions avoided

2.5. Country Ownership: Country Eligibility and Country Drivenness

148. According to the Instrument for the Establishment of the Restructured Global Environment Facility, Montenegro qualifies for GEF financing on the following grounds:

- It has ratified the UN Framework Convention on Climate Change; and
- It receives development assistance from UNDP's core resources.

149. The objective of the project is consistent with the Montenegrin Constitution's stated aim of becoming an 'ecological state'. The revised Tourism Development Master Plan to 2020 released in 2008 and followed by the Strategic Environmental Assessment (SEA) of the plan, refocused Montenegro's tourism strategy, placing much more emphasis on its environmental sustainability.

150. Montenegro's Initial National Communication (INC) to UNFCCC, submitted on 12th October 2010, identified sustainable development of the tourism sector among the top socio-economic and environmental priorities of the country. Tourism in recent years has been one of the main drivers of recent economic growth and increase in GHG emissions.

151. The proposed project will directly support four out of the seven priority areas identified by the Montenegro Strategy for Sustainable Development (MSSP), namely 1) sustainable mobility through appropriate management in transport; 2) sustainable tourism as a leading sector of the economy; 3) sustainable urban development, and 4) improved rational use of energy, increased use of energy from renewable sources.

152. Reflecting the stated Government priorities, the CPAP and UNDAF both make explicit reference to environmental sustainability and, in particular, to the need for sustainable urban and tourism development. The Integrated UN Programme (2010-15) contains, as one of its three pillars, sustainable economic development and environmental protection. The Policy Agenda for Growth and

Competitiveness in Montenegro specifically identifies sustainable tourism development as being a national priority. The proposed project is fully aligned and will support the implementation of the UNDP CPAP (2010-2016) Output 15 "Innovative CC mitigation measures implemented to reduce GHG emissions, create new jobs, and increase revenues for the local/national budget".

153. The proposed new GEF project to promote carbon neutral tourism can be seen as highly complementary to UNDP's ongoing activities and strategic priorities in Montenegro. Consisting mainly of TA-type activities, the proposed project is also in full accordance with the type of activities where UNDP is seen to have a comparative advantage among the GEF implementing agencies.

154. The project is focused on local capacity building and transferring energy efficiency know-how and tools to local level decision-makers and professionals and can build upon and complement the following UNDP-implemented initiatives:

- UNDP's Spatial Planning Support project in Montenegro, which seeks to integrate sustainable development principles into the planning process and improve enforcement of the legislation on Planning and Construction. Duration: 2007-on-going

  Objective: ensuring integration of sustainable development principles into the planning process in Montenegro and improving enforcement of the legislation on Planning and Construction.
  Main achievements of the project so far could be divided into three categories:

  i) Development and adoption of strategies and spatial planning documentation in 12 northern Municipalities which represent the main base for municipal socio economic development and attractiveness of investments;

  ii) Capacity development of administrative and technical employees in all Montenegrin municipalities related to spatial planning issues, and adequate regulation development; and

  iii) Knowledge sharing, public participation, increase of public awareness related to spatial planning, faster and more efficient exchange of information between local and central level related to spatial planning documentation development and adoption, as well as regulatory framework improvement.

- UNDP's Sustainable Tourism Project, which supports the implementation of the Strategic Framework for Development of Sustainable Tourism in Northern & Central Montenegro. Duration: 2007-on-going

  Objective: Project aims at development of nature based tourism in Montenegro, with special focus on hiking and biking, and tourism safety through adoption of legislation framework and capacity building activities, as well as development of cross border nature-based tourism offer. Implementation of cross border pilot initiatives (MNE-Croatia, MNE-Serbia), with main focus on sustainable use of natural resources, creation of joint tourism offer and improvement of livelihoods and tourism-based income generating activities for local population

  Results achieved so far:

  i) Creation of legislative framework for development of hiking and biking in Montenegro: by-laws and internal acts for the Mountaineering rescue service (MRS) under the Mountaineering Association; Registry of trails; Conditions and ways of choosing the host of the trail; Standards for the trails;

  ii) Capacity building: Establishment of a 2-year business plan for MRS; strategic development plan for the Rescue Service;

  iii) Licensing for current and future rescuers

  iv) Formalization of the International standards acceptance and membership in IKAR

  v) International distribution networks for Hiking and Biking products

  vi) Pilot trail equipped in accordance with the legislation

vii) Support to Mountaineering and Biking Association for the acceptance of international standards as well as membership in respective bodies

- UNDP-GEF Enabling Activities for UNFCCC to develop 2nd National Communication, GHG inventory and Montenegro's First Biennial Update Report (all on-going)

- UNDP "Beautiful Cetinje" project (July 2011 – December 2015) - Donor: Old Royal Capital Cetinje (Budget: 5.5 mil USD). The Beautiful Cetinje project deals with economic revitalization of the old royal capital through urban reconstruction of the cultural heritage with energy efficient considerations, provision of vocational trainings, support to small businesses and encouragement of green design ideas and innovations in the overall urban development. Key results achieved so far are: (i) Reconstructed the main city square – King's Nikola square; (ii) Retrofitted the Music Academy building; (III) Started activities on the reconstruction of square in Njegusi; (iv) Started activities on retrofitting the old hospital "Danilo I"; (v) Reconstructed damaged roof of the Academy of Arts; (vi) Trained 10 unemployed persons from Cetinje for energy efficient retrofits; (vii) Implemented two green design ideas in urban development in Cetinje – design for reconstruction of the old green market in historical core of Cetinje, and design for urban improvement and evaluation of Vrtjeljka hill; and (viii) Organized student competitions for urban development of the Student's square.

- Establishment of the Montenegro Center for Sustainable Development (CSD) with an objective to promote sustainable development tailored to the specific needs of Montenegro and the Western Balkan region and with the initial focus on (i) sustainable tourism, (ii) sustainable energy (including energy efficiency and renewable energy), (iii) resource and ecosystem management and (iv) resilience to climate change and environmental security. The CSD has been officially launched in January 2014 with objective to gradually become a full-fledged independent Montenegrin/regional institution to initiate and manage projects dealing with sustainable development. The Steering Committee overseeing the CSD operations is composed by the Minister of Sustainable Development and Tourism, Minister of Foreign Affairs and EU integration, Prime Minister cabinet representative as well as other relevant government, civil society and academia representatives.

155. Highlighting the priority and importance that UNDP assigns to the proposed project, UNDP has allocated 57,500 US$ from its TRAC resources (or US$ 11,500 per year) to co-finance the management cost of the project. This represents 10% of the total TRAC resources allocated by UNDP to Montenegro (i.e. 115,000 US$/year) or over 30% of the amount available for programming in the Energy and Environment field.

156. The GEF Operational Focal Point, Mr. Andro Drecun, The Deputy Minister of the Ministry of Sustainable Development and Tourism has endorsed the project with letters signed on August 02, 2012 and December 16, 2013.

2.6. Financial Modality and Cost-Effectiveness

157. From the total requested GEF financing (US$ 3,090,000), US$ 1,050,000 has been allocated for use as complementary grant co-financing in Outcome 3 for flagship RES, EE and low/no carbon transport and possible carbon sequestration projects in accordance with the draft criteria elaborated in chapter 2.

158. From the remaining US$ 2,040,000, US$ 1,893,000 will be used for technical assistance type of activities in accordance with the Project Results Framework in Chapter 3. US$ 147,000 i.e. less than 5% of the total budget will be used for project management.

159. The combined direct and indirect global benefits of the project have been assessed at over 430 kilotons of CO_{2eq}. With a GEF funding request of US$3.09 million, this corresponds to an abatement cost of less than US$ 8 per tonne of CO_2 reduced.

2.7. Sustainability (including Financial Sustainability)

160. For the sustainability of the project, it is essential that the measures and activities promoted and supported offer both long and shorter term "win-win-win-win" opportunities i.e. while (1) reducing the pressure caused by the rapidly increased tourist flow to the environment, also (2) creating direct cost saving benefits and/or new revenue streams to the targeted private sector investors and clients, (3) enhancing the travel experience and improving the service level to the visiting tourists, and (4) fostering further sustainable economic growth of the country in general. During the project preparation, several opportunities were identified to meet these criteria.

161. To ensure financial sustainability, the GEF cost-sharing for investments is limited by the criteria discussed in chapter 2.1 taking into account realistic cost-sharing opportunities by the NTCF or other carbon offset schemes after the project. This beside an opportunity to test the different approaches in the pilot projects will directly contribute to the financial sustainability of also the NTCF. The importance of effectively engaging the private sector from the very beginning is also recognized throughout the project document.

162. For certain low carbon measures, in particular as it concerns the promotion of public transportation (improved intercity bus service, proposed new marine transport etc.) the financial risks are high and the immediate financial returns insecure, while still being essential building blocks of the low carbon tourism concept as a whole. The situation is similar in the promotion of non-motorized transport, where no direct financial benefits from building new cycle lanes etc. can be foreseen. For these kind of measures, the participation and risk/cost-sharing of the central and/or local administration is essential for ensuring continuing service (or maintenance as it concerns any new infrastructure) also after the project has ended. Unless this is foreseen, GEF resources are not going to be invested in these kinds of efforts either.

163. What is written above also applies for institutional sustainability. Institutional strengthening and capacity building will generate longer term benefits only, if the recipient entities are empowered by a clear mandate and corresponding responsibilities to contribute to low carbon tourism sector development in the project relevant fields, and adequate financial resources are secured for fulfilling this mandate also after the project.

2.8. Replicability

164. Given the foreseen interest of several UNDP-GEF programme countries to develop and implement similar measures to promote environmentally sustainable tourism, the materials developed and the results and lessons learned in this project are expected to be of direct interest also to other countries. Close monitoring and evaluation of project implementation and reporting of results will also in this respect be of primary importance.

165. The project seeks to facilitate continuing contacts and co-operation between the different stakeholder groups at the national and international level by organizing seminars, workshops and other public events, thereby bringing project proponents, policy makers and potential investors / other donors together. Further co-operation opportunities with leading international tourism organizations such as the UNWTO, WTTC and others as well as with the UNDP-GEF Global Aviation project will also be explored in this respect. The cross border co-operation started in the frame of the UNDP's Sustainable Tourism project and discussed in further detail in chapter 2.5 of this project document provides one complementary platform for replication of projects results at the regional level.

2.9 Innovation

166. The project includes several innovative elements by taking a sectoral rather than a technology specific approach to GHG mitigation and being one of the first GEF funded projects to address the tourism sector. By recognizing the major impact that the international cross border travel will have on the overall carbon footprint of tourism industry, the project seeks to extend its impact beyond the

national borders by liaising with the global initiatives to reduce the carbon footprint of air travel and international cruise shipping in particular.

167. In supporting the pilot projects, the project will explore the options to share the costs of them by innovative performance based grants and/or risk sharing (depending on the type of the pilot projects), thereby testing these for further replication in the National Tourism Climate Fund (NTCF) and adding to the experiences and lessons learnt for the use of other countries.

168. Finally, some pilot projects brought up as examples for initial screening and further development belong to first of their kind globally, such as an entirely RE driven cable car and a solar assisted marine transport system integrated into a public transportation system to be used both by tourists and the local residents, carbon neutral shore power offered to visiting yachts and cruisers, low carbon hybrid vehicle fleet of taxis and rental cars etc.

3. PROJECT RESULTS FRAMEWORK

This project will contribute to achieving the following Country Programme Output as defined in CPAP: Output 15 "Innovative CC mitigation measures implemented to reduce GHG emissions, create new jobs, and increase revenues for the local/national budget"					
Country Programme Outcome Indicators: Level of Greenhouse Gas Emissions					
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR **2. Catalyzing environmental finance** OR 3. Promote climate change adaptation OR 4. Expanding access to environmental and energy services for the poor.					
Applicable GEF Focal Area Objective: GEF-5 FA Objective # 4 (CCM-4): "Promote Energy Efficient, Low-Carbon Transport and Urban Systems"					
	Indicator	**Baseline**	**Targets - End of Project**	**Source of verification**	**Risks and Assumptions**
Project Objective[57] Reduce GHG emissions from Montenegro's tourism sector and maintain the overall tourism sector related GHG emissions at the 2013 level or lower despite the rapidly growing number of visitors	The tourism sector related GHG emissions compared to the estimated level in 2013 Amount of reduced CO_2 emissions by the investments facilitated by the project	2013: 70-100 ktCO2 2020: 170 ktCO2 0 0	2020: 70-100 ktCO2 The tourism sector related total GHG emissions in Montenegro not exceeding the level in 2013. Direct GHG emission reduction impact: 77 ktons CO_{2eq} over the 20-years default lifetime of the investments made during project implementation with direct GEF support. Indirect GHG emission reduction impact: Cumulative indirect GHG reduction impact of 173,7 ktons of CO_{2eq} by the end of 2023 or over 360 ktons by the end of 2028.	Project monitoring reports and final evaluation. GHG accounting and climate finance system for the tourism sector to be established during project and, as applicable, post-project market monitoring and evaluations.	Adoption of a supportive regulatory framework, related financial mechanisms and/or financial/fiscal incentives

[57] *Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR*

	Extent to which climate finance is being accessed to support low-carbon tourism: a. Not adequately b. Very partially c. Partially d. Largely Extent to which there is a system in place to access, deliver, monitor, report on and verify climate finance in tourism sector: a. Not adequately b. Very partially c. Partially d. Largely	a. Not adequately a. Not adequately	d. Largely d. Largely		
Outcome 1[58]: Legal and regulatory framework supporting low carbon tourism and low carbon spatial development, including increased certification of both existing and new tourist accommodation facilities and related services by internationally recognized environmental certification scheme(s)	Status of suggested amendments to the Law on Tourism, Tourism Sector Development Strategy, Law on Spatial Planning and, as applicable, other related documents Share from all registered tourist accommodation facilities constructed and operated in accordance with the EU Ecolabel or	Low carbon tourism related provisions not included in the Laws <1 % (4)	Amendments into the Law on Tourism, Tourism Sector Development Strategy, Law on Spatial Planning and Construction and, as applicable, other related documents to promote low carbon tourism adopted. At least 33% of all officially registered collective tourist accommodation facilities and at least 100 private (non-collective) tourist accommodation facilities in at least 6 different coastal	Project's intermediate and final results reports on low carbon policies Project's mid-term and final evaluation. Public registries about all registered hotels *vis-à-vis* those listing the	

[58] *All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.*

	similar internationally recognized certification scheme. Number of low carbon spatial plans developed	0	cities to be certified by EU Ecolabel or similar internationally recognized certification scheme, and of which 25% to operate on a fully carbon neutral basis. At least one low carbon spatial plan developed in each of the 4 municipalities	hotels being ecocertified	
Outcome 2: Improved low carbon and carbon neutral transport infrastructure to support tourism sector related public and non-motorized transport.	Number and type of new low carbon or carbon neutral intermodal transport hubs and corridors.	NA	The main air and marine entry ports certified as low carbon facilities, including "climate friendly" shore power supply for visiting cruisers and yachts The new Kotor-Cetinje cable car developed and constructed as a carbon free transport corridor. Bus stations in at least 2 cities established as low carbon tourist welcome centers. At least 25 km of new non-motorized transport corridors approved for funding.	Project's intermediate and final results reports on low carbon transport Project's mid-term and final evaluation	Required political support for the planned actions
Outcome 3: Pilot investments to support low carbon tourism development implemented, followed up by the establishment of a sustainable financing mechanism to support climate change mitigation and adaptation actions in the tourism sector	Status of implementation and resulting GHG emission reductions from the pilot projects Status of the financing mechanisms and amount of financing leveraged for supporting climate change mitigation and adaptation actions in the tourism sector.	None	New tourism sector related GHG mitigation projects financed at the amount of at least EUR 3.6 million resulting in direct GHG reduction of at least 77 ktons of CO_{2eq} over their lifetime. National Tourist Climate Fund established by the end of the second year of project implementation and mechanism(s) for its capitalisation in place by at least 2 milllion euros annually.	Project's financial reports Status report of the Fund	Available baseline financing and required political support for the planned actions
Outcome 4: GHG emission	Annually reported GHG	None	Verified, annually reported GHG	Annual GHG	Agreements

monitoring system and increased public awareness about the carbon footprint of the tourism sector, its GHG reduction potential and measures.	emissions from tourism sector. Availability of new promotional low/no carbon tourist products and services	None	emissions of tourism sector by type of activity. New promotional low carbon products and services such as specific booking systems, low carbon tourist welcome cards connected with voluntary carbon offset fees , green meetings and other innovative products and services integrated into the offers of official and commercial tourism related websites and other information and marketing materials (incl. international travel fairs), local tourism offices and international travel agencies	monitoring reports Project's intermediate and final results reports on PR and marketing related activities	and mechanisms in place to monitor and regularly obtain the required data
	Market share of certified low carbon tourism services among all registered tourism services in each respective field (accommodation, transport etc.)	< 1 %	Certified low carbon tourism services gaining an annually increasing market share of the tourism sector turnover in Montenegro.	Tourism sector economic and statistical surveys	
	Share of visiting tourist in Montenegro actively looking for and using low/no carbon tourist services		Awareness of and demand for low and no carbon tourism services, as measured by related visitor surveys, show an annually increasing trend	Structured sample surveys (interviews) of the visiting tourists	

PROJECT OUTPUTS AND RELATED TARGET(S)/SUB-TARGET(S), AS APPLICABLE

Outcome 1: Upgraded legal and regulatory framework supporting low carbon tourism and low carbon spatial planning, including increased certification of both existing and new tourist accommodation facilities and related services by internationally recognized environmental certification scheme(s)	**Outcome 2:** Improved low carbon and carbon neutral transport infrastructure to support tourism sector related public and non-motorized transport.	**Outcome 3:**Pilot investments to support low carbon tourism development implemented, followed up by a sustainable financing mechanism to support climate change mitigation and adaptation actions in the tourism sector	**Outcome 4:**GHG emission monitoring system and increased public awareness about the carbon footprint of the tourism sector, its GHG reduction potential and measures
Output 1.1 An updated review of available international eco-certification schemes and other international best practices for promotion of low-carbon tourism with related recommendations on the most feasible one(s) to be promoted in Montenegro (in particular in coastal areas) as well as for linking with the Montenegrin Wild Beauty Brand, which has been developed and is promoted for the nature tourism in rural and mountain areas.	**Output 2.1**: An intercity and intermodal low carbon sustainable transport management and development strategy and action plan for the tourism sector with a focus on Kotor Bay and other coastal area, addressing issues related to spatial planning and transport demand management, role of the public sector to encourage and facilitate increasing use of public transportation, possible incentive and marketing schemes, options for greening the existing fleet etc.	**Output 3.1**: Call for proposals for the pilot carbon mitigation projects to be cost-shared by the GEF resources and finalized selection of the projects.	**Output 4.1** A PR strategy and action plan for effectively promoting the different aspects of low carbon tourism in Montenegro among the visiting tourists and other key stakeholders
Output 1.2 Draft amendments to the Sustainable Development Strategy, Transport Strategy, Law on Tourism, Law on Spatial Planning and Construction and related guidebooks and other secondary legislation to effectively promote low carbon tourism development in Montenegro, including advancing of mandatory certification of all tourist accommodation facilities in Montenegro for their environmental and energy performance and/or to provide specific financial/fiscal incentives for the continued voluntary action.	**Output 2.2** Development of the existing or planned new public transport initiatives such Kotor-Cetinje cable car and Kotor Bay marine transport as carbon neutral flagship transport projects driven entirely or primarily by renewable energy sources	**Output 3.2** Finalized design of the projects, including a monitoring, reporting and verification protocol	**Output 4.2**: Establishment of a working group consisting of MONSTAT, Environment Protection Agency and tourism industry associations, such as the Montenegrin Hotel Association, to develop a methodology for and agree on the procedures for GHG emission accounting and baseline data setting in tourism sector
Output 1.3 Improved division of responsibilities, co-ordination and co-	**Output 2.3** At least 2 bus stations in different cities transformed to low carbon	**Output 3.3** Report of the initial results and lessons learnt from the pilot projects	**Output 4.3**: Independently validated GHG emissions inventory and monitoring

operation between the central government, local municipal administrations and the private sector, and enhanced capacity of the key local stakeholders to implement, enforce and further develop the new policies and regulations	tourist welcome centers.	and finalisation of a replication strategy and investment plan (including, as applicable, an initial project pipeline) for the use of the NTCF.	system for tourism sector and its sub-sectors (accommodation, travel, waste, etc.) and regular annual reporting of tourism sector related energy consumption and greenhouse gas emissions by type of activities
Output 1.4: A web-based "one stop" eco-certification support and advisory center and hot line backstopped by trained staff of the NTO, local municipal tourist organisations and/or Montenegrin hotel association established and an outreach campaign to reach potential candidates for eco-certification implemented.	**Output 2.4** Decision(s) to construct at least 25 km of new non-motorized transport corridors (walking and cycle lanes) around the Kotor Bay and along the coast completed and approved for funding, combined with improved bike transport services for longer intercity trips.	**Output 3.4** Establishment of the National Tourism Climate Fund and drafted legal and regulatory amendments for eventual new levies, carbon offset charges etc. to support the capitalization of the Fund.	**Output 4.4**: Guidelines for developing and setting up monitoring, reporting and verification (MRV) protocols and systems for investment projects submitted for funding by the GEF, NTCF or voluntary carbon offset schemes and finalisation of the related documentation for at least one investment project as a model for others (with a link to output 3.2).
Output 1.5 Trained auditors and initial audits for eco-certification conducted for at least 200 tourist accommodation facilities (100 collective and 100 smaller private houses/apartments) with related recommendations for meeting the certification criteria.	**Output 2.5** The new transport services required by the new major green field developments such as Lustica, Kumbor, Sv. Marko Island, Velika Plaza and Ada Bojana resorts developed as low or no carbon initiatives.	**Output 3.5** Introduction of a set of mandatory and/or voluntary carbon offset schemes**.** For voluntary carbon offset schemes, selecting the partners and integrating the scheme(s) into Montenegro tourism related booking systems for transport, accommodation, tours etc. with related, "up-to-date" carbon footprint calculation tools.	**Output 4.5:** Public awareness raising on the carbon footprint of different transport modes, development of the related web-based calculation tools and carbon offset offers and further promotion of the transport options with the lowest carbon footprint such as rail travel within the overall low carbon tourism offer of Montenegro.
Output 1.6 A shortlist of qualified equipment suppliers, planners and installers (with complementary training, as needed) to support the tourist accommodation owners and managers with required retrofits + an associated feedback / quality control mechanism in place.	**Output 2.6** Low carbon / eco-certified international entry ports and corridors including, as applicable, the Podgorica and Tivat airports, Port Kotor and Bar and new yacht marinas, including an option to connect the visiting cruisers and yachts to public power grid backed up by on site RE generation (such as PV or wind) rather than using vessels' own engines when in harbour, and raising the passengers' and yacht owners' awareness on the latest		**Output 4.6:** Upgraded Montenegro tourism website(s) with a stronger focus on environmental aspects, low carbon footprint calculators and booking systems providing priority access and/or specific visibility, logos and filtering systems for low carbon and carbon neutral tourism offers for accommodation, transport and catering services.

	technology advances to reduce the carbon footprint of marine cruising and yachting and on possible carbon offsetting.		
Output 1.7: At least 5 trained and by the authorized organisation certified Montenegrin auditors and, as applicable, third party certifiers of the promoted eco-certification scheme.			**Output 4.7:** Outreach and public awareness raising on the NTCF and carbon offsetting.
Output 1.8 At least one low carbon spatial plan developed for each of the 4 participating municipalities, which will test impact of pilot investments from component 3 on local spatial development and explore its possible replication			**Output 4.8:** Development of new products for and introduction of other promotional measures and initiatives to support low carbon tourism such as: • Improve consumer awareness, transparency and standards/rulebooks for carbon footprint labelling of all tourism products, like transport tickets, accommodation, holiday packages, tours and other activities; • "Green footprint" tourist welcome cards, which could be given, for instance, in return to visitors paying a voluntary or mandatory carbon offset fee and including rebates for and/or free use of local public transportation and bike lending services, rebates for "eco-labelled" accommodation, shops and restaurants etc: • Green meetings • Green guest loyalty programs and promotion of "Leave no Trace" tourism.
Output 1.9 Provision of training and capacity building for other key stakeholders such as urban planners and architects on low carbon community development			**Output 4.9**: After being justified by the developments that have taken place, launch an international PR campaign to position Montenegro as an ecofriendly, low carbon or carbon neutral holiday destination and raise tourists' awareness

			about posibilities of offseting their carbon footprint for any residual emissions.
			Output 4.10: Three studies (one at the beginning, one at the mid-point and one at the end) on the actual use of services that can be classified as "low-carbon tourist services" in the accommodation and transport sectors, including also surveys on the perception/ preference of the visiting tourists towards these services and Montenegro as a low carbon tourist destination in general for analysing and monitoring the impact of the project activities and supporting PR work
			Output 4.11: Final project report, summarizing the key results and lessons learnt

Project Implementation Plan

Project component	2014		2015				2016				2017				2018				2019	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Component 1																				
Activities leading to Output 1.1																				
Activities leading to Output 1.2																				
Activities leading to Output 1.3																				
Activities leading to Output 1.4																				
Activities leading to Output 1.5																				
Activities leading to Output 1.6																				
Activities leading to Output 1.7																				

Activities leading to Output 1.8																					
Activities leading to Output 1.9																					
Component 2																					
Activities leading to Output 2.1:																					
Activities leading to Output 2.2																					
Activities leading to Output 2.3																					
Activities leading to Output 2.4																					
Activities leading to Output 2.5																					
Activities leading to Output 2.6																					
Component 3																					
Activities leading to Output 3.1:																					
Activities leading to Output 3.2																					
Activities leading to Output 3.3																					
Activities leading to Output 3.4																					
Activities leading to Output 3.5																					
Component 4																					
Activities leading to Output 4.1																					
Activities leading to Output 4.2																					
Activities leading to Output 4.3																					
Activities leading to Output 4.4																					
Activities leading to Output 4.5																					
Activities leading to Output 4.6																					
Activities leading to Output 4.7																					
Activities leading to Output 4.8																					
Activities leading to Output 4.9																					
Activities leading to Output 4.10																					

4. TOTAL BUDGET AND WORKPLAN

Award ID:	00079785	Project ID(s):	00089673
Award Title:	Montenegro - Towards Carbon Neutral Tourism		
Business Unit:	UNDP Montenegro CO		
Project Title:	**Montenegro–Towards Carbon Neutral Tourism**		
PIMS no.	**5149**		
Implementing Partner (Executing Agency)	UNDP		

GEF Outcome/ Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budget. Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	See Budget Note:
OUTCOME 1	**UNDP**	**62000**	**GEF**	71200	International Consultants	15 000	15 000	13 500	7 500	5 250	**56 250**	1
				71300	Local Consultants	16 360	28 360	19 860	18 160	5 660	**88 400**	2
				71400	Contractual services – indiv.	37 840	37 840	37 840	37 840	37 840	**189 200**	3
				71600	Travel	4 000	4 000	3 000	2 000	2 000	**15 000**	4
				72100	Contractual services – comp.	16 000	32 000	40 000	36 000	6 000	**130 000**	5
				72200	Equipment	1 000	12 000	1 000	0	0	**14 000**	6
				73100	Rental & maintenance –prem.	5 000	6 000	6 000	6 000	3 000	**26 000**	7
				74500	Miscellaneous	800	800	800	800	350	**3 550**	
				75700	Workshops and meetings	1 000	1 500	1 500	1 000	600	**5 600**	8
				Sub-total GEF		**97 000**	**137 500**	**123 500**	**109 300**	**60 700**	**528 000**	
	Total Outcome 1					**97 000**	**137 500**	**123 500**	**109 300**	**60 700**	**528 000**	
OUTCOME 2	**UNDP**	**62000**	**GEF**	71200	International Consultants	10 000	15 000	15 000	10 000	10 000	**60 000**	1
				71300	Local Consultants	10 000	15 000	15 000	10 000	2 000	**52 000**	2
				71400	Contractual services – indiv.	20 680	20 680	20 680	20 680	20 680	**103 400**	3
				71600	Travel	2 500	4 000	4 000	2 500	2 000	**15 000**	4
				72100	Contractual services – comp.	20 000	45 000	45 000	30 000	10 000	**150 000**	9
				72200	Equipment	0	10 000	30 000	10 000	0	**50 000**	10
				73100	Rental & maintenance –prem.	5 000	6 000	6 000	6 000	3 000	**26 000**	7
				74500	Miscellaneous	820	820	820	820	320	**3 600**	
				75700	Workshops and meetings	2 000	2 000	2 000	2 000	2 000	**10 000**	8

				Sub-total GEF		**71 000**	**118 500**	**138 500**	**92 000**	**50 000**	**470 000**	
	Total Outcome 2					**71 000**	**118 500**	**138 500**	**92 000**	**50 000**	**470 000**	
OUTCOME 3	**UNDP**	**62000**	**GEF**	71200	International Consultants	10 000	15 000	15 000	10 000	10 000	**60 000**	1
				71300	Local Consultants	8 000	8 000	8 000	8 000	4 400	**36 400**	2
				71400	Contractual services – indiv.	18 080	18 080	18 080	18 080	18 080	**90 400**	3
				71600	Travel	2 500	4 000	4 000	2 500	2 000	**15 000**	4
				72200	Equipment		7 000	14 000	10 000	7 000	**38 000**	11
				72600	Grants	0	200 000	400 000	300 000	150 000	**1 050 000**	12
				74500	Miscellaneous	1 020	1 020	1 420	1 020	720	**5 200**	
				75700	Workshops and meetings	1 000	1 000	1 000	1 000	1 000	**5 000**	8
				Sub-total GEF		**40 600**	**254 100**	**461 500**	**350 600**	**193 200**	**1 300 000**	
	Total Outcome 3					**40 600**	**254 100**	**461 500**	**350 600**	**193 200**	**1 300 000**	
OUTCOME 4	**UNDP**	**62000**	**GEF**	71200	International Consultants	20 000	15 000	25 000	10 000	27 500	**97 500**	1
				71300	Local Consultants	20 000	30 000	30 000	20 000	24 280	**124 280**	2
				71400	Contractual services – indiv.	37 840	37 840	37 840	37 840	37 840	**189 200**	3
				71600	Travel	4 000	3 000	5 000	3 000	5 000	**20 000**	4
				72100	Contractual services – comp.	5 000	10 000	10 000	25 000	50 000	**100 000**	13
				72200	Equipment	2 000	10 000	10 000	3 000	0	**25 000**	14
				73100	Rental & maintenance –prem.	5 000	6 000	6 000	6 000	3 000	**26 000**	7
				74200	Printing and publication costs	4 000	8 000	10 000	10 000	8 000	**40 000**	15
				74500	Miscellaneous	1 660	1 660	1 660	1 660	1 380	**8 020**	
				75700	Workshops and meetings	3 000	3 000	3 000	3 000	3 000	**15 000**	8
				Sub-total GEF		**102 500**	**124 500**	**138 500**	**119 500**	**160 000**	**645 000**	
	Total Outcome 4					**102 500**	**124 500**	**138 500**	**119 500**	**160 000**	**645 000**	
Project Management	**UNDP**	**62000**	**GEF**	71400	Contractual services – indiv.	25 440	25 440	25 440	25 440	25 440	**127 200**	3
				71600	Travel	400	400	400	400	400	**2 000**	4
				72200	Equipment	1 500	1 000	500	0	0	**3 000**	
				72400	Communication	1 000	1 000	1 000	1 000	1 000	**5 000**	
				72500	Office supplies	1 000	1 000	1 000	1 000	1 000	**5 000**	
				74500	Miscellaneous	900	900	900	900	1 200	**4 800**	
				Sub-total GEF		**30 240**	**29 740**	**29 240**	**28 740**	**29 040**	**147 000**	
		4000	**UNDP**	73100	Rental & maintenance –prem.	11 500	11 500	11 500	11 500	11 500	**57 500**	
				Sub-total UNDP		**11 500**	**11 500**	**11 500**	**11 500**	**11 500**	**57 500**	
	Total Project Management					**41 740**	**41 240**	**40 740**	**40 240**	**40 540**	**204 500**	
TOTAL GEF	**UNDP**	**62000**	**GEF**			**341 340**	**664 340**	**891 240**	**700 140**	**492 940**	**3 090 000**	
TOTAL UNDP	**UNDP**	**4000**	**UNDP**			**11 500**	**11 500**	**11 500**	**11 500**	**11 500**	**57 500**	

GRAND TOTAL	**352 840**	**675 840**	**902 740**	**711 640**	**504 440**	**3 147 500**	

Budget Notes

Number	Note
1	Consultancy fee, excluding mission (travel) costs
2	Local short-term consultants
3	Local long-term consultants / core project team consisting of the project manager and the team leaders
4	Travel costs of both international and local consultants
5	Development and management of the ecocertification website and hot line + cost-sharing of the first year certification costs
6	Required hard and software for institutional strengthening of low carbon community planning
7	Project office costs
8	Costs of training workshops and stakeholder consultations meetings
9	Contracts for feasibility studies of low carbon investments
10	Cost sharing for transforming at least 2 bus stations to low carbon tourist welcome centers
11	Equipment for monitoring and quality control
12	Cost sharing of carbon mitigation investment projects
13	Cost sharing of national and international PR campaigns
14	Equipment for monitoring
15	Including awareness-raising and training materials and those for ensuring visibility according to GEF-UNDP guidelines

Summary of Funds[59]

Source of Funding	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	341 340	664 340	891 240	700 140	492 940	**3 090 000**
UNDP (incl. "Beautiful Cetinje") project	811 500	811 500	11 500	11 500	11 500	**1 657 500**
Other co-financing cash	5 000 000	6 700 000	35 550 000	35 550 000	35 637 862	**118 437 862**
Other co-financing in-kind	362 400	362 400	362 400	362 400	362 400	**1 812 000**
TOTAL	6 515 240	8 538 240	36 815 140	36 624 040	36 504 702	**124 997 362**

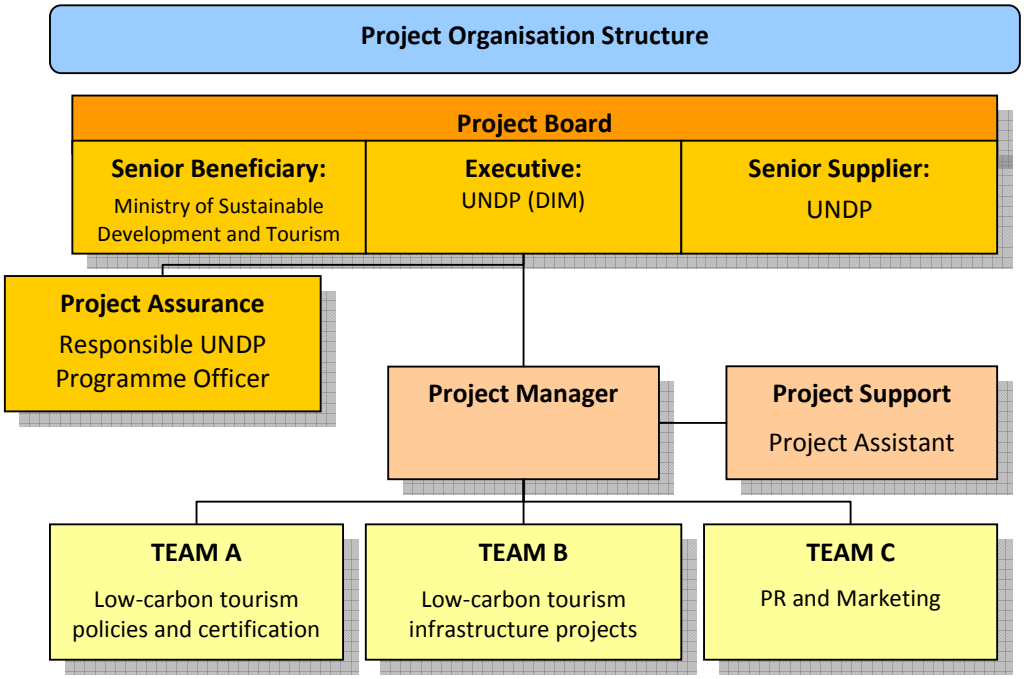
[59] Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc.

SUMMARY OF PROJECT CO-FINANCING (IN USD)[60]

		Ministry of Sustainable Development and Tourism	Local Government (Municipalities)	NTO	Italian Government	UNDP	**TOTAL**
Outcome 1	Cash	1 500 000			273 597	1 600 000	3 373 597
	In-kind	150 000	162 000				312 000
Outcome 2	Cash		112 017 069		506 156		112 523 225
	In-kind						
Outcome 3	Cash		4 100 000				4 100 000
	In-kind						
Outcome 4	Cash						
	In-kind			1400000			1 400 000
Project management	Cash				41 040	57 500	98 540
	In-kind			100 000			100 000
TOTAL	Cash	**1 500 000**	**116 117 069**		**820 793**	**1 657 500**	**120 095 362**
	In-kind	**150 000**	**162 000**	**1 500 000**			**1 812 000**
Description		1 million for development of Coastal Area Management Plan and Spatial Plan for Coastal Area in 2014-2015 + 0,5 million over 5 yrs for development of detailed spatial planning documentation needed for future development of tourist facilities. In kind contribution relates to salaries of Ministry officials contributing to and managing these activities.	Salaries of municipal staff contributing to the development of spatial plans and investments to low carbon infrastructure Outcome 2: Baseline financing of the Kotor-Cetinje cable car Outcome 3: Baseline financing of other low carbon investment projects In-kind: Development and management of the activities above	Implementation of national and international public awareness raising and marketing campaigns to promote low carbon tourism offers and Montenegro as a low tourist carbon destination in general	Development of a master plan for Green Blue Economy for the Kotor Bay area and support for selected pilot projects.	Beautiful Cetinje project UNDP TRAC contribution	
Co-financing letter #		1	2	3	4	5	

[60] All baseline activities and associated co-financing amounts presented in the table relate to the period after the approval of the PIF (or prodoc ?) . Baseline expenditures for activities already undertaken or which are expected to be undertaken after the end of the GEF project are not included in the PIF. Furthermore, the co-financing amounts stated in the table above are considered to be conservative estimates

5. MANAGEMENT ARRANGEMENTS



169. The Ministry of Sustainable Development and Tourism (MSDT) is the government institution responsible for the implementation of the project and will act as the Implementing Entity/Responsible Partner. UNDP is the Executing Entity/Implementing Partner for the project and accountable to the GEF for the use of funds. The project is a direct implementation modality (DIM) project[61] **,**in line with the Standard Basic Assistance Agreement (SBAA, 2006) between the UNDP and the Government of Montenegro, and the Country Programme Action Plan (CPAP) for 2012-2016.

170. The overall responsibility for the project implementation by the Ministry of Sustainable Development and Tourism (MSDT) implies the timely and verifiable attainment of project objectives and outcomes. The MSDT will provide support to, and inputs for, the implementation of all project activities.

171. Working closely with the Ministry of Sustainable Development and Tourism, the UNDP Country Office (UNDP-CO) will be responsible for: (i) providing project assurance services to government (ii)

[61] The Government of Montenegro requested the project to be directly implemented by UNDP. Please refer to the Letter of Endorsement to this project.

recruitment of project staff and contracting of consultants and service providers; (iii) overseeing financial expenditures against project budgets approved by PSC; and (iv) ensuring that all activities including procurement and financial services are carried out in strict compliance with UNDP/GEF procedures. A UNDP staff member will be assigned with the responsibility for the day-to-day management and control over project finance.

172. The UNDP country office shall provide support services for the Project as: (i) HR activities including recruitment of project personnel, issuance of project personnel contracts etc; (ii) process of undertaking procurement activities of project goods and services; (iii) finance transactions; etc and charge the DPC according to Actual Price List for Direct Support Cost"

173. A Project Board will be established at the inception of the project to monitor project progress, to guide project implementation and to support the project in achieving its listed outputs and outcomes. It will be co-chaired by UNDP and MSDT. The MSDT, as the key governmental agency in charge of spatial planning, tourism development, environmental protection and climate change policies, will ensure that other governmental agencies are duly consulted and involved as per their mandate such as the Ministry of Economy, Ministry of Finance and the Ministry of Transport, Maritime Affairs and Communications and pilot municipalities. The Board can also include representatives of national and regional tourism organizations and the CSD, by ensuring, however, that the Board will remain sufficiently lean to facilitate its effective operation. Other participants can be invited into the Board meetings at the decision of the Board. The Board will meet regularly (at least twice a year) to review project progress, discuss and agree on project work plans. One of the key tasks of the Board will be to ensure coordination and synchronization of central and local-level activities supported by the project. In this respect, the Board will sereve as a platform for key project stakeholders and beneficiaries to regularly get together and design a joint strategy of work on the project.

174. The final list of the Project Board members will be completed at the outset of project operations and presented in the Inception Report by taking into account the envisaged role[62] of different parties in the Board. The project manager will participate as a non-voting member in the Board meetings and will also be responsible for compiling a summary report of the discussions and conclusions of each meeting.

175. The day-to-day management of the project will be carried out by a Project Management Unit (PMU) under the overall guidance of the Project Board. The PMU will be established in Podgorica consisting of a full time Project Manager, Administrative Assistant and three Team Leaders responsible for their specific areas, as elaborated in the organizational chart above. For successfully doing this, public outreach, establishment of the contacts and co-operation with the key local and international stakeholders and expert institutions as well as ability for adaptive management and new innovative approaches will be of utmost importance and will be emphasized in the recruitment. Furthermore, the project is envisaging to contract a half-time spatial planning and GHG emission monitoring expert and an experienced international project adviser (part time) to support the project inception phase and project's adaptive management and progress monitoring throughout the project implementation. This core team will be complemented during the project implementation by the required short time legal, technical and financial experts to support the identified specific areas of work. Contacts with experts and institutions in other countries that have already gained experience in developing and implementing similar measures are also to be established. The Project Manager will report to UNDP and the Project Board. The Terms of Reference of the key project personnel are presented in Section IV, Part IV of this Project Document. The project personnel will be selected on a competitive basis in accordance with the relevant UNDP rules and procedures and in consultation with the UNDP-GEF Regional Technical Adviser.

[62] **Senior Supplier**: individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. **Senior Beneficiary**: individual or group of individuals representing the interests of those who will ultimately benefit from the project.

176. At the outset of project operations, a project inception report will be prepared in co-operation with the key stakeholders, local and international expert(s) engaged in leading or supporting the implementation of the project. The inception report will include detailed work plans for each subcomponent (output) of the project at the specific activity level and elaboration of the required resources and stakeholders to be involved for reaching the stated targets. These output specific work plans will provide the main basis for day-to-day management, implementation and monitoring of the progress of the project, complemented by the annual monitoring to be done at the Outcome level by the PIRs. For further details about the project's overall monitoring and evaluation framework, see chapter 6.

177. The UNDP Country Office in Montenegro currently manages a programme portfolio of total value of over $10.5 million. It offers the following dedicated staff capacity for project implementation support in the area of environment and energy: (i) Environment and Economy Analyst who oversees programme implementation on a daily basis, including quality assurance and monitoring and evaluation; (ii) Climate Change and Energy Programme Manager – oversees the implementation of projects in the field of Climate Change and Energy on a daily basis, including quality assurance and monitoring and evaluation; (iii) Environment and Economy Assistant – assists with budget revisions, quarterly reporting, auditing and recruitment procedures; (iv) Finance Analyst - reviews the budgets and monitors project delivery status; (v) Head of Operations Unit - assures compliance with overall fiduciary standards of UNDP; (viii) UNDP Resident Representative, who liaise at high-level with the Government and will negotiate key policy changes proposed by the project.

178. UNDP Montenegro will maintain the oversight and management of the overall project budget. It will be responsible for monitoring project implementation, timely reporting of the progress to the UNDP Regional Co-ordination Center and the GEF as well as organizing mandatory and possible complementary reviews and evaluations on an as-needed basis. It will also be responsible for procurement of the required expert services and other project inputs and administer the required contracts. Furthermore, it will support the co-ordination and networking with other related initiatives and institutions in the country.

179. For successfully reaching the objective and outcomes of the project, it is essential that the progress of different project components will be closely monitored both by the key local stakeholders and authorities as well as by project's international experts, starting with the finalization of the detailed, component-specific work plans and implementation arrangements and continuing through the project's implementation phase. The purpose of this is to facilitate early identification of possible risks to successful completion of the project together with adaptive management and early corrective action, when needed.

180. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including any hardware purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgement to GEF in accordance with the respective GEF guidelines.

181. The international experiences and lessons learned from facilitating environmentally sustainable tourism sector development, including those from the other UNDP managed projects in Montenegro have been taken into account in the design of this new project. The activities of the other donors and the foreseen synergies and opportunities for co-operation have been discussed in further detail in chapter 1.6. During implementation, proper care will be taken to have adequate communication and co-ordination mechanisms in place to ensure that areas of common interest can be addressed in a most cost-efficient way.

6. MONITORING FRAMEWORK AND EVALUATION

182. The project will be monitored through the following M&E activities. The M&E budget is presented at the end of this chapter.

Project Start

183. A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, the UNDP Country Office and – where appropriate/feasible – regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

184. The Inception Workshop should address a number of key including:

185. Assist all partners to fully understand and take issues ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.

186. Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, including adding of and agreement on the mid-term targets of each outcome in the project's M&E plan and re-check assumptions and risks.

187. Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.

188. Discuss financial reporting procedures and obligations, and arrangements for annual audit.

189. Plan and schedule Project Board meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 12 months following the inception workshop.

190. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly

191. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.

192. Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).

193. Based on the information recorded in Atlas, Project Progress Reports (PPRs) can be generated in the Executive Snapshot.

194. Other ATLAS logs can be used to monitor issues, lessons learned, etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually

195. Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and, in particular, for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

196. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes – each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual)
- Lesson learned/good practice
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS QPR

197. Portfolio-level indicators (e.g. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring Through Site Visits

198. The UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first-hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

Mid-term of Project Cycle

199. The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course corrections if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

200. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project

201. An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability

of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

202. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

203. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

204. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Learning and Knowledge Sharing

205. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

206. The project will identify and participate in, as relevant and appropriate, scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

207. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Communications and Visibility Requirements

208. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at http://intra.undp.org/coa/branding.shtml, and specific guidelines on UNDP logo use can be accessed at: http://intra.undp.org/branding/useOfLogo.html. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects need to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF_logo.The UNDP logo can be accessed at http://intra.undp.org/coa/branding.shtml.

209. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf.

210. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

211. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

M & E WORKPLAN AND BUDGET

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Inception Workshop and Report	Project Manager supported by an International Expert UNDP CO, UNDP GEF	Indicative cost: 10,000	Within first two months of project start up
Measurement of Means of Verification of project results.	UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	To be finalized in Inception Phase and Workshop.	Start, mid- and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on output and implementation	Oversight by Project Manager Project team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	Project manager and team UNDP CO, UNDP RTA, UNDP EEG	None	Annually
Periodic status/ progress reports	Project manager and team	None	Quarterly
Mid-term Evaluation	Project manager and team UNDP CO, UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost: 20,000	At the mid-point of project implementation.
Final Evaluation	Project manager and team, UNDP CO UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost : 20,000	At least three months before the end of project implementation
Project Terminal Report	Project manager and team UNDP CO local consultant	15,000 US$	At least three months before the end of the project
Audit	UNDP CO Project manager and team	Indicative cost per year: 1,000	Yearly
Visits to field sites	UNDP CO UNDP RCU (as appropriate) Government representatives	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US$70,000 (+/- 5% of total budget)	

7. LEGAL CONTEXT

212. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA and all CPAP provisions apply to this document.

213. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

214. The implementing partner shall:

- put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

215. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

216. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

217. Audit Clause: The Audit will be conducted in accordance with UNDP Financial Regulations and Rules and applicable audit policies on UNDP projects.

8. ANNEXES

Annex 8.1. Offline Risk Log

#	Description	Date identified	Type	Probability & Impact	Countermeasures / Mgt response	Owner	Submitted, updated by	Last Update	Status
1	Lack of political will to adopt required legal and regulatory changes to promote low-carbon tourism		Political	No policy basis and incentives to catalyze the RE market P[63] = 2 I[64]= 4	The Government of Montenegro has prioritized sustainable development of its tourism industry as a key national socio-economic priority. Also, the vision of Montenegro as an ecological state is imprinted in the national constitution. The proposed legal and regulatory changes have been discussed with and endorsed by the Government during the project preparation process and have been evaluated as feasible. During project implementation, more detailed feasibility studies and impact assessments will be prepared to backstop the proposed changes. Many targeted outputs do also not require any particular legal and regulatory changes, but can also proceed as private sector driven initiatives.	Project Board		N/A	N/A
2	Technical failures of the promoted technologies and		Technology	Loss of consumer confidence affecting	The promoted technologies can already considered to be technically mature technologies, so the risk of	Project Board		N/A	N/A

[63]Probability from 1 (low) to 5(high)

[64]Impact from 1 (low) to 5 (high)

#	Description	Date identified	Type	Probability & Impact	Countermeasures / Mgt response	Owner	Submitted, updated by	Last Update	Status
	building practices leading to the loss of trust by targeted customers on the proposed measures.			negatively the market P = 2 I = 4	their technical failure due to the early stage of their technical development is considered as low. This does not detract, however, from the importance of adequate quality control of both products and installations at all stages of implementation.				
3.	Due to budget constraints, the Government reduces the funds available for low-carbon tourism development.		Financial	Lack of capital to sustain the envisaged financial incentives and arrangements P = 4 I = 3	Strong budget constraints are indeed the major limitation faced by the MSDT when it comes to promoting and supporting low-carbon tourism development. Ministry's budget has been severely (by 30%) cut recently as a result of austerity measures introduced by the Government of Montenegro to cope with the consequences of global financial crisis. Component 3 of the project was designed specifically to mitigate this risk by identifying alternative sources of financing for climate change mitigation and adaptation in tourism	Project Board		N/A	N/A
4.	Risk that private investment do not materialize		Financial	Lack of capital to realize the planned investments. P = 2 I = 4	According to the estimates of the WTTC, in 2012 25% of all capital investment in Montenegro was made in the Travel & Tourism industry – one of the highest shares in the world, and this is forecasted to rise to about 50% in 2023. By helping	Project Board		N/A	N/A

#	Description	Date identified	Type	Probability & Impact	Countermeasures / Mgt response	Owner	Submitted, updated by	Last Update	Status
					Montenegro to develop a unique market niche and position itself as a carbon-neutral travel destination, the project will help improve competitiveness and attractiveness of the country on the global market and create additional stimulus for investors and travellers to come.				
5.	Climate risk to tourism infrastructure		Environmental	Damage on the infrastructure P = 2 I = 3	Montenegro's tourism sector, especially the coastal zone, is vulnerable to climate change. To build sector's resilience a number of adaptive measures are proposed in the INC, such as amendment to spatial planning laws and upgrade of the existing infrastructure and buildings. The proposed project will help mitigate climate risks by making sure that the revised Spatial Planning Law makes due provisions for climate proofing and the new tourism facilities are designed and constructed accordingly. Also, the National Tourism Climate Fund to be set up under Component 3 will accumulate funding for both climate mitigation and adaptation measures with a particular focus on the synergies between the two.	NA		N/A	N/A
6	Lack of adequate and reliable		Organizational	Reduced information from	Close cooperation with the public authorities, tourism industry	National Project			

#	Description	Date identified	Type	Probability & Impact	Countermeasures / Mgt response	Owner	Submitted, updated by	Last Update	Status
	market data to facilitate the monitoring of project impacts and planning of further policy measures.			the reaction of the market on the measures implemented P = 3 I = 4	associations and owners of the facilities to obtain the required data. Cross-checking of the reliability of the data by comparing the results from different statistical sources, and by different approaches (e.g. top-down, bottom-up, on-site checking)	Manager (NPM).			
7	Inadequate and/or non-capacitated human resources to successfully implement the project and support the mainstreaming of its results.		Operational	Project not meeting the stated targets P = 2 I = 5	Recruitment of the key project staff based on competitive selection procedures emphasizing the qualifications and requirements set up in the ToR. Effective planning and day-to-day monitoring of the progress towards the set targets to complement the regular annual monitoring, including the use of international expert support to backstop and build up the local capacity when and as needed.	National Project Manager (NPM)		N/A	N/A

Annex 8.2. Letters of co-financing

The co-financing letters are included as separate attachments.

Annex 8.3. Terms of Reference

Project Board

Duties and responsibilities:

The Project Board is the main body to supervise the project implementation in accordance with UNDP rules and regulations and referring to the specific objectives and the outcomes of the project with their agreed performance indicators.

The main functions of the Board are:

- General monitoring of project progress in meeting its objectives and outcomes and ensuring that they continue to be in line with national development objectives;
- To provide strategic leadership and serve as coordination mechanisms for various partners involved;
- Facilitating the co-operation between the different Government entities, whose inputs are required for successful implementation of the project, ensuring access to the required information and resolving eventual conflict situations raising during the project implementation when trying to meet its outcomes and stated targets;
- Supporting the elaboration, processing and adoption of the required institutional, legal and regulatory changes to support the project objectives and overcoming of related barriers;
- Facilitating and supporting other measures to minimize the identified risks to project success, remove bottlenecks and resolve eventual conflicts;
- Approval of the annual work plans and progress reports, the first plan being prepared at the outset of project implementation;
- Approval of the project management arrangements; and
- Approval of any amendments to be made in the project strategy that may arise due to changing circumstances, after careful analysis and discussion of the ways to solve problems.

Structure and Reimbursement of Costs

To ensure proper coordination and involvement of key stakeholders, the Project Board will be co-chaired by UNDP and MSDT. The MSDT, as the key governmental agency in charge of spatial planning, tourism development, environmental protection and climate change policies, will ensure that other governmental agencies are duly consulted and involved as per their mandate (such as the Ministry of Economy, Ministry of Finance and the Ministry of Transport, Maritime Affairs and Communications). The Board may also include representatives of pilot municipalities, national and regional tourism organizations, by ensuring, however, that the Board will remain sufficiently lean to facilitate its effective operation. Other participants can be invited into the Board meetings at the decision of the Board.

The costs of the Board's work shall be considered as the Government's or other project partners' voluntary in-kind contribution to the project and shall not be paid separately by the project. Members of the Board are also not eligible to receive any monetary compensation from their work as experts or advisers to the project.

Meetings

It is suggested that the Board will have regular meetings, twice a year, or more often if required. A tentative schedule of the Board meetings will be agreed as a part of the annual work plans, and all representatives of the Board should be notified again in writing 14 days prior to the agreed date of the meeting. The meeting will be organized provided that the executing agency, UNDP and at least 2/3 of the other members of the Board can confirm their attendance. The project manager shall distribute all materials associated with the meeting agenda at least 5 working days in prior to the meeting.

National Focal Point

As a representative of the Government and the project's executing agency, the National Focal Point has the main responsibility to ensure that the project is executed in accordance with the Project Document and the UNDP guidelines for direct implemented projects.

His/her main duties and responsibilities include:

- Coordinate and guide the work of the Project Manager with the work of the MSDT through meetings at regular intervals to receive project progress reports and provide guidance on policy issues;
- Certifying the annual and, as applicable, quarterly work plans, financial reports and ensuring their accuracy and consistency with the project document and its agreed amendments;
- Taking the lead in developing linkages with the relevant authorities at national, provincial and governmental level and supporting the project in resolving any institutional or policy related conflicts that may emerge during its implementation.

Project Manager (full-time)

Duties and responsibilities:

Operational project management in accordance with the Project Document and the UNDP guidelines and procedures for direct implemented projects, including:

- General coordination, management and supervision of project implementation;
- Managing the procurement and the project budget under the supervision of UNDP to assure timely involvement of local and international experts, organisation of training and public outreach, purchase of required equipment etc. in accordance with UNDP rules and procedures;
- Submission of annual Project Implementation Reviews and other required progress reports (such QPRs) to the PSC and the UNDP in accordance with the section "Monitoring and Evaluation" of the Project Document;
- Supervising and coordinating the contracts of the experts working for the project;
- As applicable, communicating with the project's international partners and attracting additional financing in order to fulfil the project objectives; and
- Ensuring otherwise successful completion of the project in accordance with the stated outcomes and performance indicators summarized in the project's results framework and within the planned schedule and budget.

In addition to the overall management of the project as described above, the project manager will take the lead on all the carbon financing related aspects of the project, including:

- Output 3.4: Establishment of the National Tourism Climate Fund and drafted legal and regulatory amendments (supported by the project's legal experts) for eventual new levies, carbon offset charges etc. as well as to identify and leverage other financing sources and develop new financing models to support the capitalization of the Fund and the financing of climate change mitigation and adaptation projects in general.
- Output 3.5 Introduction of a set of mandatory and/or voluntary carbon offset schemes. For voluntary carbon offset schemes, selecting the partners and integrating the scheme(s) into Montenegro tourism related booking systems for transport, accommodation, tours etc. with related, "up-to-date" carbon footprint calculation tools.

Expected Qualifications:

In evaluating the candidates applying for the position of the project manager, it is highlighted that a committed, full-time project manager with adequate outreach and networking skills is absolutely essential for the success of the project. Therefore, a specific emphasis in the evaluation will be placed on the demonstrated and proven capacity and results of the applicants to: i) engage the key stakeholders into constructive discussion about future development of sustainable tourism in Montenegro; ii) to guide and supervise the studies done and effectively co-operate with the international experts who are engaged to support this work; iii) to present their findings and recommendations in a convincing manner to key policy-makers and opinion leaders by taking into account the main macroeconomic and policy drivers for the development of local tourism industry; and iv) to identify areas of future work.

Contributing to the requirements above, the candidates applying for the position are expected to have:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the project is dealing with, including solid knowledge of the state-of-the-art approaches and best practices in catalyzing environmentally sustainable tourism sector development;
- Experience in managing projects of similar complexity and nature, including demonstrated capacity to actively explore new, innovative implementation and financing mechanisms to achieve the project objective;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organise it, and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Good communication skills and competence in handling project's external relations at all levels;
- Fluent/good knowledge of Montenegrin and English languages; and
- Familiarity and prior experience with UNDP and GEF requirements and procedures are considered as an asset

Project Assistant (full-time)

Duties and responsibilities:

Supporting the project manager in the implementation of the project, including:

- Responsibility for logistics and administrative support of project implementation, including administrative management of the project budget, required procurement support, etc.
- Maintaining up to date business and financial documentation, in accordance with UNDP and other project reporting requirements;
- Organizing meetings, business correspondence and other communications with the project partners;
- Ensuring effective dissemination of, and access to, information on project activities and results and supporting the project outreach and PR activities in general, including keeping the project web-site up to date;
- Managing the projects files and supporting the project manager in preparing the required financial and other reports required for monitoring and supervision of the project progress;
- Supporting the project manager in managing contracts, in organizing correspondence and in ensuring effective implementation of the project otherwise.

Expected Qualifications:

- Fluent/good knowledge of the Montenegrin and English languages
- Demonstrated experience and success of work in a similar position
- Good administration and interpersonal skills
- Ability to work effectively under pressure
- Good computer skills

Low Carbon Tourism Policy and Certification Expert (full time)

Duties and responsibilities:

Taking the lead in advancing and monitoring the progress of all the low carbon tourism policy and certification related activities and making sure that the set targets are timely met. The specific outputs managed by the low carbon tourism policy expert consist of:

- Output 1.1: An updated review of available international eco-certification schemes with related recommendations on the most feasible one(s) to be promoted in Montenegro (in particular in coastal areas) as well as for linking with the Montenegrin Wild Beauty Brand developed and promoted for the nature tourism in rural and mountain areas;
- Output 1.2 Draft amendments to the Sustainable Development Strategy, Transport Strategy, Law on Tourism, Law on Spatial Planning and Construction and related guidebooks and other secondary legislation to effectively promote low carbon tourism development in Montenegro, including advancing of mandatory certification of all tourist accommodation facilities in Montenegro for their environmental and energy performance and/or to provide specific financial/fiscal incentives for the continued voluntary action.

- Output 1.3 Improved division of responsibilities, co-ordination and co-operation between the central government, local municipal administrations and the private sector, and enhanced capacity of the key local stakeholders to implement, enforce and further develop the new policies and regulations
- Output 1.4: A web-based eco-certification support and advisory center and hot line backstopped by trained staff of the NTO, local municipal tourist organisations and/or Montenegrin hotel association established and an outreach campaign to reach potential candidates for eco-certification implemented;
- Output 1.5: Trained auditors and initial audits for eco-certification conducted for at least 200 tourist accommodation facilities (100 collective and 100 smaller private houses/apartments) with related recommendations for meeting the certification criteria;
- Output 1.6 A shortlist of qualified equipment suppliers, planners and installers (with complementary training, as needed) to support the tourist accommodation owners and managers with required retrofits + an associated feedback / quality control mechanism in place;
- Output 1.7: At least 5 trained and by the authorized organisation certified Montenegrin auditors and, as applicable, third party certifiers of the promoted eco-certification scheme;

Expected Qualifications:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the assignment is dealing with, including solid knowledge of the state-of-the-art approaches and international best practices in low/no carbon policies and certification;
- Experience in managing tasks of similar complexity and nature, including demonstrated capacity for effective outreach and engagement of key national and international stakeholders;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability to adaptively manage with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organize the tasks and to motivate its members and other project counterparts to effectively work towards the set targets;
- Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Montenegrin and English languages.

Low Carbon Tourism Infrastructure and Investment Expert (full time)

Duties and responsibilities:

Taking the lead in advancing and monitoring the progress of all the transport sector and infrastructure investment project related activities and making sure that the set targets are timely met. The specific outputs managed by the low carbon tourism infrastructure and investment expert consist of:

- Output 2.1: An intercity and intermodal low carbon sustainable transport management and development strategy and action plan for the tourism sector with a focus on Kotor Bay and other coastal area, addressing issues related to spatial planning and transport demand management, role of the public sector to encourage and facilitate increasing use of public transportation, possible incentive and marketing schemes, options for greening the existing fleet etc.;
- Output 2.2: Development of the existing or planned new public transport initiatives such Kotor-Cetinje cable car and Kotor Bay marine transport as carbon neutral flagship transport projects driven entirely or primarily by renewable energy sources;
- Output 2.4: Decision(s) to construct at least 25 km of new non-motorized transport corridors (walking and cycle lanes) around the Kotor Bay and along the coast completed and approved for funding, combined with improved bike transport services for longer intercity trips;
- Output 2.5: The new transport services required by the new major green field developments such as Lustica, Kumbor, Sv. Marko Island, Velika Plaza and Ada Bojana resorts developed as low or no carbon initiatives;
- Output 2.6: Low carbon / eco-certified international entry ports and corridors including, as applicable, the Podgorica and Tivat airports, Port Kotor and Bar and new yacht marinas, including an option to connect the visiting cruisers and yachts to public power grid backed up by on site RE generation (such as PV or wind) rather than using vessels' own engines when in harbour, and raising the passengers' and yacht owners' awareness on the latest technology advances to reduce the carbon footprint of marine cruising and yachting and on possible carbon offsetting (the latter to be managed in co-operation with the project's PR and marketing expert);
- Output 3.1: Call for proposals for the pilot carbon mitigation projects to be cost-shared by the GEF resources and finalized selection of the projects (in co-operation with the other experts working on the project);
- Output 3.2 Finalized design (supported by the required short term technical and other experts) of the pilot projects to be cost-shared with the GEF funds, including a monitoring, reporting and verification protocol;
- Output 3.3: Report of the initial results and lessons learnt from the pilot projects and finalization of a draft replication strategy and investment plan (including, as applicable, an initial project pipeline) for the use of the NTCF.

Expected Qualifications:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the assignment is dealing with, including solid knowledge of the state-of-the-art approaches, international best practices and latest technology advances in the areas of the targeted pilot initiatives, including sustainable energy and sustainable transport development;
- Experience in managing tasks of similar complexity and nature, including demonstrated capacity for effective outreach and engagement of key national and international stakeholders;

- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability to adaptively manage with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organize the tasks and to motivate its members and other project counterparts to effectively work towards the set targets;
- Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Montenegrin and English languages.

Spatial Planning and GHG Monitoring Expert (part time)

Taking the lead in advancing and monitoring the progress of all spatial planning related activities and making sure that the set targets are timely met. Besides, the Spatial Planning Expert will be in charge for organizing and supervising the progress of the GHG emission monitoring related activities under Outcome 4. The specific outputs managed by the spatial planning expert consist of:

- As a part of outputs 1.2 and 1.3, analyzing and making recommendations to the amendment of the existing legal, regulatory and institutional framework as it concerns any spatial planning related issues
- Output 1.8 At least one low carbon spatial plan developed, which will test the impact of pilot investments from component 3 on local spatial development and explore its possible replication
- Output 1.9 Provision of training and capacity building for other key stakeholders such as urban planners and architects on low carbon community development
- Output 4.2: Establishment of a working group consisting of MONSTAT, Environment Protection Agency and tourism industry associations, such as the Montenegrin Hotel Association, to develop a methodology for and agree on the procedures for GHG emission accounting and baseline data setting in tourism sector;
- Output 4.3: Independently validated national reference baseline for GHG emissions from tourism sector and its sub-sectors (accommodation, travel, waste, etc.) and regular annual reporting of tourism sector related energy consumption and greenhouse gas emissions by type of activities;
- Output 4.4: Guidelines for developing and setting up monitoring, reporting and verification (MRV) protocols and systems for investment projects submitted for funding by the GEF, NTCF or voluntary carbon offset schemes and finalisation of the related documentation for at least one investment project as a model for others (with a link to output 3.2); and
- Contributing to other outputs under outcomes 2, 3 and 4 as it concerns any spatial planning GHG emission monitoring and accounting related issues

Expected Qualifications:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the assignment is dealing with, including solid knowledge of the state-of-the-art approaches and international best practices in low carbon spatial planning and GHG emission accounting ;
- Experience in managing tasks of similar complexity and nature, including demonstrated capacity for effective outreach and engagement of key national and international stakeholders;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability to adaptively manage with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organize the tasks and to motivate its members and other project counterparts to effectively work towards the set targets;
- Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Montenegrin and English languages.

Public Awareness Raising and Marketing Expert (full time)

Duties and responsibilities:

Taking the lead in advancing and monitoring public awareness raising and marketing activities and making sure that the set targets are timely met. The specific outputs managed by the Public Awareness Raising and Marketing expert consist of:

- Output 4.1 A PR strategy for effectively promoting the different aspects of low carbon tourism in Montenegro among the visiting tourists and other key stakeholders
- Output 2.3: At least 2 bus stations in different cities transformed to low carbon tourist welcome centers;
- As a part of output 2.6: Establish low carbon information centres and/or info stands in main airports and marine ports/marinas to promote carbon offsetting and to raise the air and cruise passengers' and yacht owners' awareness on the latest technology advances to reduce the carbon footprint of air travel, marine cruising and yachting;
- Output 4.5: Public awareness raising on the carbon footprint of different transport modes, development of the related web-based calculation tools and carbon offset offers and further promotion of the transport options with the lowest carbon footprint such as rail travel within the overall low carbon tourism offer of Montenegro;
- As a part of Output 3.5: For voluntary carbon offset schemes, selecting the partners and integrating the scheme(s) into Montenegro tourism related booking systems for transport, accommodation, tours etc. with related, "up-to-date" carbon footprint calculation tools;

- Output 4.6 Upgraded Montenegro tourism website(s) with a stronger focus on environmental aspects, low carbon footprint calculators and booking systems providing priority access and/or specific visibility, logos and filtering systems for low carbon and carbon neutral tourism offers for accommodation, transport and catering services.
- Output 4.7: Outreach and public awareness raising on the NTCF and carbon offsetting;
- Output 4.8: Development of new products for and introduction of other promotional measures and initiatives to support low carbon tourism such as:
    - Improve consumer awareness, transparency and standards/rulebooks for carbon footprint labelling of all tourism products, like transport tickets, accommodation, holiday packages, tours and other activities;
    - "Green footprint" tourist welcome cards, which could be given, for instance, in return to visitors paying a voluntary or mandatory carbon offset fee and including rebates for or free use of local public transportation and bike lending services, rebates for "eco-labelled" accommodation, shops and restaurants etc:
    - Green meetings
    - Green guest loyalty programs and promotion of "Leave no Trace" tourism.
    - Green track rail travel
- Output 4.9 After being justified by the developments that have taken place, launch an international PR campaign to position Montenegro as an eco-friendly, low carbon or carbon neutral holiday destination and raise tourists' awareness about possibilities of offsetting their carbon footprint for any residual emissions;
- Output 4.10: Three studies (one at beginning, one at the mid-point and one at the end) on the actual use of services that can be classified as "low-carbon tourist services" in the accommodation and transport sectors, including surveys on the perception/ preference of the visiting tourists towards these services and Montenegro as a low carbon tourist destination in general to analyse and monitor the impact of the project activities and supporting PR work
- Output 4.11: Final project report, summarizing the key results and lessons learnt

Beside managing and being responsible for specific outputs of the project, the Environmental Monitoring, Public Awareness Raising and Marketing Expert will be managing the public outreach and PR activities of the project as a whole, including the design and content management of the project website.

Expected Qualifications:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the assignment is dealing with, including solid knowledge of the state-of-the-art approaches and international best practices in ecotourism product development and marketing;
- Experience in managing tasks of similar complexity and nature, including demonstrated capacity for effective outreach and engagement of key national and international stakeholders;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;

- Good analytical and problem-solving skills and the related ability to adaptively manage with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organize the tasks and to motivate its members and other project counterparts to effectively work towards the set targets;
- Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Montenegrin and English languages.

Legal Expert(s) (part time)

Duties and responsibilities:

- Identify possible legal and regulatory barriers to the targeted outcomes and outputs of the project;
- Based on the identified legal and regulatory support needs, identify appropriate legal and regulatory frameworks and documents for suggested changes and drafting those amendments for further consideration of the Government;
- Support the other project experts in clarifying the specific legal requirements, possible obstacles and requirements in implementing the planned pilot projects to be supported by the GEF funds.

Expected Qualifications:

- Advanced university degree and at least 7 years of professional experience or university degree with 10 years of professional experience in the specific areas the assignment is dealing with, including good knowledge of the legal and regulatory framework influencing the specific outcomes and outputs of the project;
- Experience in drafting legal and regulatory documents in the project related fields;
- Good analytical and problem-solving skills;
- Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Montenegrin and English languages.

International project adviser (part-time)

Duties and Responsibilities:

Support UNDP and the project management in monitoring the progress of the project and its different sub-components and, as needed, build the capacity of the local experts working for the project to successfully implement the project activities, ensuring that they comply with the agreed benchmarks and success indicators of the project as well as international best practices and lessons learnt. The expected level of involvement will be 20-40 days (including 2-4 missions) per year, which may gradually decrease towards the end of project implementation depending on how the project proceeds.

The specific responsibilities include, among others, to:

- support the local project management team in organising the implementation of the project's different sub-components at the inception phase, including support to the project manager in the preparation of the project inception report and the annual output specific work plans, drafting of Terms of Reference for the national and, as needed, additional international experts and subcontractors, required tender documents etc;
- support adaptive management by annually (or semi-annually) reviewing the progress of the project and its different subcomponents and making suggestions for eventual changes and/or complementary activities;
- propose methodologies and specific software models for market monitoring and for assessing the GHG reduction impact of the project and its outputs;
- by building on international experiences and lessons learnt from promoting low and no carbon tourism, contribute with policy recommendations to the implementation of activities under outcome 1 of the project
- support the project manager in supervising the work of the contracted individual experts and companies, including review of the feasibility studies and the technical design, financing and implementation arrangements of the planned pilot projects;
- support the project manager in arranging co-operation with the already identified key stakeholders and, as applicable, support the identification and establishment of new national and/or international partnerships and to support the project goals and objectives; and
- support the local project team in monitoring and evaluating the performance and the outcome of the pilot projects under implementation.

Expected Qualifications:

- a university degree in the project related field;
- demonstrated experience and success in supporting similar projects (or its sub-components)
- good knowledge of international experiences, state of the art approaches and best practices in the specific areas the project and its subcomponents are dealing with;
- good analytical skills and effective communication and training skills and competence in handling external relations at all levels;
- ability to work in a team and to motivate other team members and counterparts; and
- fluency in English.
- familiarity with UNDP and GEF requirements is considered as an asset.

Annex 8.4 Stakeholder Involvement Plan

Stakeholder	Envisaged role and potential areas for co-operation during project implementation
Central government administration and related organisations and companies	
National Council for Sustainable Development and Climate Change	Main forum for any cross-sectoral, inter-ministerial consultations and co-ordinated policy development to promote low-carbon tourism
Ministry of Sustainable Development and Tourism (MSDT)	A key stakeholder for any tourism sector, spatial planning and environmental protection related strategy and policy formulation and their implementation at the country level.
Ministry of Finance (MoF)	A key stakeholder for any public sector financial support related strategy and policy formulation and their implementation at the country level (Outcome 3)
Ministry of Transport, Maritime Affairs and Communications (MoT)	A key stakeholder for any transport sector related strategy and policy formulation and their implementation at the country level (Outcome 2)
Ministry of Economy	A key stakeholder for any energy sector related strategy and policy formulation and their implementation at the country level
Montenegro Environmental Protection Agency (EPA)	Eventual key partner for any GHG monitoring and verification related activities and/or those related to eco-certification
Statistical Office of Montenegro(MONSTAT)	A key partner for any GHG accounting related activities
National Tourism Organisation (NTO)	A key partner for all, but especially international public awareness raising and marketing related activities as well as for connecting with international and local travel agencies, tour operators and other related service providers. The possible role in eco-certification still to be clarified
Crnogorskog Elektroprenosnog Sistema - Montenegrin Electrical Transmission System (CGES A.D.),	A key stakeholder as it concerns the connection of any new renewable energy capacity to the grid and selling the electricity produced
JP Aerodromi Crne Gore – Airports of Montenegro	A key stakeholder for output 2.6 as it concerns the airport carbon accreditation.
Željeznički prevoz Crne Gore AD (ŽPCG AD) Railway Transport of Montenegro JSC	A key stakeholder for output as regards further development and promotion of rail transport services
Local (municipal) administration and related organisations and companies	
Central municipal administration (mayors' offices)	Key stakeholders for Outcome 2 and Output 3.1. Cetinje municipality expected to be one of the investors also in the Kotor-Cetinje cable car.
Municipal tourist organisations	Key stakeholders as it concerns any local PR and marketing related activities. The exact role in eco-certification (outcome 1) and development of intermodal transport hubs such as bus stations to tourist welcome centers (output 2.3) still be clarified)
Luka Kotor - Port of Kotor	A key stakeholder for output 2.6 as it concerns environmental certification of Port Kotor and implementation of measures to reduce the GHG and other emissions of the visiting cruisers and cruise passengers)
Luka Bar – Port of Bar	Eventual co-operation opportunities for Output 2.6, but still to be clarified. At the moment, limited marine passenger traffic only.
Porto Montenegro and other yacht marinas	Key stakeholders for output 2.6 as it concern environmental certification of the yacht marinas and implementation of measures to reduce the GHG and other emissions of the visiting yachts, when in

	harbour.
NGOs	
Montenegro Green Building Council	A possible partner to explore new ways of improving EE and increased on-site RE generation in tourist accommodation facilities
Montenegro Hotel Association	An essential partner for all activities dealing with the tourist accommodation facilities, particularly in Budva.
Montenegro Tourism Association	An essential partner representing larger existing hotels
Private companies and investors	
Main international and local travel agencies, tour operators and transport companies engaged in different type of tourism business in Montenegro	To be engaged and consulted for low carbon and carbon neutral tourism product/offer development and marketing approach + eventual joint development of those products
Local bus companies (Blue Line, Božur, Zejdin)	To be engaged and consulted for output 2.1 and eventual further co-operation opportunities for outputs 2.2 – 2.4
Porto Montenegro	Eventual co-operation opportunities for outputs 1.3, 2.5 and 2.6 (also as an eventual training site for new EE, RE and transport solutions) for auditors, hotel managers, designers and other building professionals)
ORASCOM (Lustica Development)	Eventual co-operation opportunities for outputs 1.3 and 2.5 (also as an eventual training site for new EE, RE and transport solutions) for auditors, hotel managers, designers and other building professionals)
SOCAR / Kerzner (Kumbor)	See above
Utheja Apartments	One of the forerunners in eco-certification and developing carbon neutral tourist accommodation in Montenegro. The owner certified for doing audits for EU Eco labelling also for other tourist accommodation facilities and with interest in training new auditors → eventual co-operation opportunities for output 1.5
International organisations and financing entities	
EU Delegation to Montenegro	A number of initiatives and financing windows to be explored further for eventual co-operation opportunities: (http://www.delmne.ec.europa.eu/code/navigate.php?Id=2220).
EBRD	A possible source of financing for feasibility studies (through the trust funds managed by EBRD) and lending for the actual investments (financing of Kotor – Cetinje cable care already in the pipeline)
Austrian Development Co-operation (ADC) and the Austrian Ministry of Environmental Protection	Possible further co-operation opportunities in the area of environmental certification (still to be explored). The Austrian Ministry for Environmental Protection one of the authorized EU entities to issue EU Ecolabels and certify the auditors.
Italian Ministry of Environment, Land and Sea	Further co-operation opportunities in the context of the ongoing projects supported by the Italian Government (such as MONTESOL, Blue Green Economy) and those in the planning phase still to be explored. Expected cost-sharing of the pilot/demo projects.
UN World Tourism Organisation (UNWTO)	Dissemination and possible technical backstopping in the form of studies, eventual international seminars and workshops etc.
UNESCO World Heritage Center	Eventual consultations on any new measures affecting he UNESCO World Heritage Sites in Montenegro
United Nations Environmental Program (UNEP)	Currently supporting the implementation of the MONTESOL project. Eventual further co-operation opportunities to support the solar thermal market in Montenegro

Annex 8.5 Greenhouse Gas Emission Reduction Analysis

The GHG emissions reduction analysis is following the approved GEF methodology[65] to estimate the direct and indirect GHG reduction impact of the project and correcting the latter with a GEF project causality factor. No direct post-project impact has been considered in the analysis since the GEF resources will be used as one-time capital grant support without expected pay-back: i.e. no new loan or loan guarantee mechanism will be created with the GEF funds. Furthermore, it was not considered as applicable to conduct a top-down GHG emission reduction analysis for indirect emissions, since no credible baseline accounting of tourism sector related energy consumption and GHG emissions in Montenegro yet exist.

Baseline GHG emissions from Montenegro's tourism sector

Baseline GHG emissions from Montenegro's tourism sector comprise of emissions resulting from energy use in tourist accommodation, in-country road transport, by cruise ships staying at harbours and other tourism-related infrastructure, such as airports. Summary of baseline emissions is presented in Table 8.1 below and detailed estimates for each sub-sector - in Table 8.2 at p. 88.

Table 8.1: Summary of Baseline GHG emissions from Montenegro's in-country tourism activities

Estimated in-country baseline emissions in 2013	**K $tCO2_{2eq}$**
Accommodation	45.24
Local transport	20.30
Cruise ships at harbor	16.62
Others (airports)	1.21
Total	**83.38**

Project GHG Emissions Reductions

The direct GHG emission reduction benefits of the project are resulting from the investment projects supported by project funding. In accordance with the draft criteria elaborated in chapter 2.1 under outcome 3, the GEF grant support for investment projects shall not exceed EUR 10 per estimated ton of CO_2 reduced during the lifetime of the projects. This, combined with the total allocated GEF resources of USD 1,050,000 million (about EUR 770,000) to support these first investment projects, will result in the minimum project target for direct GHG emission reduction of 77 ktons of CO_2 .

For indirect GHG emission reduction, the project has set a target to reduce the maintain national tourist sector related GHG emissions within Montenegro (excluding cross-border travel) at the 2013 level despite of the rapidly increasing number of tourist that are expected to visit Montenegro over the coming years. Among the main activities to achieve this, the following can be mentioned:

- supporting low-carbon spatial planning and construction practices for new tourist accommodation facilities and encouraging both new and existing tourist accommodation facilities to certify their premises as low or no-carbon ones with the related investments in

[65] GEF/C.33/Inf.18,Manual for calculating GHG benefits of GEF projects: energy efficiency and renewable energy projects, April 2008.

different energy saving measures, such as more efficient electric appliances including lighting, air-conditioning and their automatic control and switch-off, food refrigeration, solar water heating, specific water saving devices and others;

- supporting the required preparatory work and encouraging the local port authorities and investors to introduce and expand shore power supply (to the extent possible relying on RE generated power complemented, as applicable, by voluntary carbon offset) thereby reducing the need to run the visiting cruisers' and yachts' own diesel engines when staying at harbors;
- encouraging the local low and/or no carbon transport options such as non-motorized transport by new attractive cycle and pedestrian lanes, increasing use of renewable energy sources such as RE powered electric vehicles and new transport modes (such as water transport and cable cars), the use of bio fuels in local busses and improved public transport services in general;
- providing technical assistance for the establishment of a National Tourism Climate Fund (NTCF) as a specific account with the Ministry of Finance and managed by the MDST to collect proceeds from new compulsory and/or voluntary charges on carbon emissions and re-invest them in climate mitigation and adaptation projects in the tourism sector; and
- supporting the design and implementation of extensive public awareness raising and promotional campaigns (including the introduction new carbon offset schemes) to support the goals elaborated above.

According to the projections of the WTTC, the international tourist arrivals are expected to grow from 1,3 million in 2012 (excluding cruise visitors) to close to 3 million in 2023. This means that in order achieve the target to maintain the tourist sector related "in-country" GHG emissions at the 2013 level or lower, the specific GHG emissions per visiting tourist and/or one overnight stay originating from the accommodation, transport and other services should be cut by about 7-8 % per year or 50 % by 2023.

In line with the above, the combined cumulative indirect GHG reduction target with a causality factor 3 (60%) for the GEF project impact has been estimated at 173,7 ktons by 2023 or over 360 ktons by 2029 i.e. 10 years after the project ends. This calculation approach presents a more conservative estimate for project's indirect impact compared to considering the impact of all tourist sector related EE and RE investments that are made and influenced by the project within 10 years after the project ends and calculated over the entire 20 years' lifetime of these investments. For the time being and for the purpose of producing these initial estimates, however, the current approach used for estimating the project's indirect GHG impact is considered as adequate. Further details on the estimated GHG reduction potential of the activities to be promoted by the project are provided in figure 8.1 below.

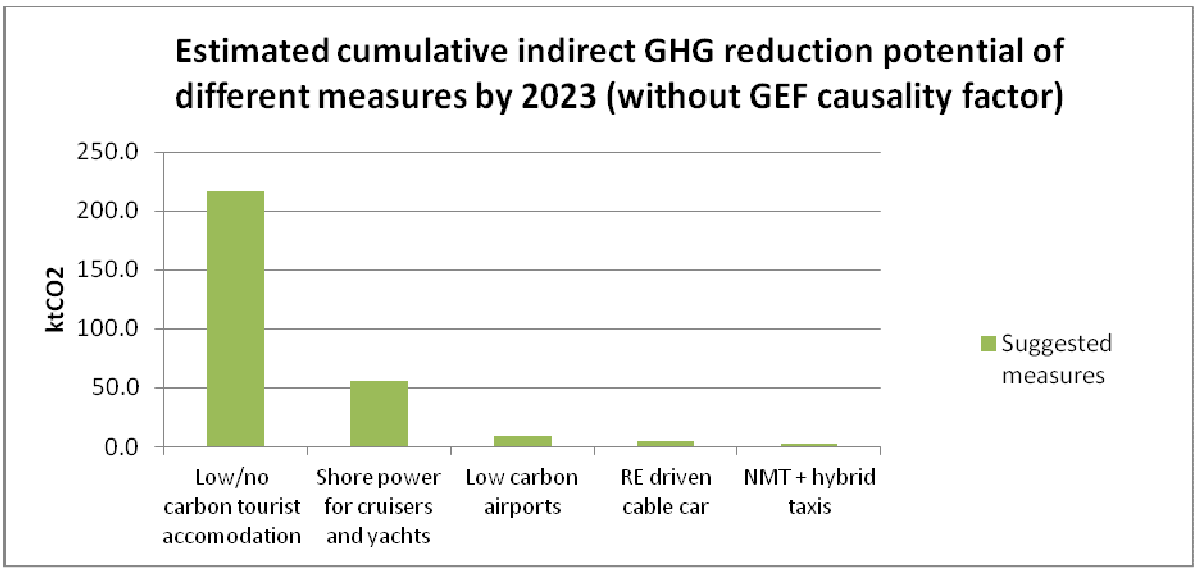


Figure 8.1 Estimated cumulative indirect GHG reduction potential of different measures by 2023

For the CO_2 emission factor of grid electricity, the most recent 2012 estimate of 0,334 $kgCO_2/kWh$ calculated under the UNDP/GEF Second National Communication project in accordance with CDM Executive Board approved methodological tool no. 7 (version 03.0.0) was used in the analysis. For all oil products, the IPCC 2006 default values were used.

The Draft Energy Development Strategy (EDS) until 2030 is envisaging some major investments both on new renewable energy and coal fired thermal power capacity, increasing the share of coal fired thermal power capacity from the current 20-22 % to 46 - 54 % in 2018-2020. Such a change would significantly alter the emission factor for grid electricity after 2018 and, correspondingly, the CO_2 emission reduction potential of the electricity saving EE and RE measures promoted by the project. Given the uncertainties with the future power sector development, however, the GHG reduction analysis at this stage has been relying on the current, more conservative estimate for the emission factor of grid electricity. During project implementation, an improved GHG accounting system together with an updated emission factor analysis (the development of which both will be supported by the project), will be used as a basis to update these initial assessments.

Some of the main assumptions, methodology and data used in the project's GHG emission reduction analysis are illustrated on the following pages. All the figures will be subject to further annual verification and improvement of their accuracy based on the outputs of the GHG emission monitoring and accounting system to be established under component 4 of the project (outputs 4.2 and 4.3).

TABLE 8.2. ESTIMATED BASELINE GHG EMISSIONS FROM IN-COUNTRY TOURIST ACCOMODATION, TRANSPORT AND RELATED SERVICES IN 2012

ACCOMODATION	Electricity (kWh)	Fuel oil (MJ)	LPG (MJ)	Coal (MJ)	**Total**
Estimated total energy consumption	125 554 958	23 588 883	18 163 295	4 112 702	**NA**
Number of overnight stays	9 151 236	9 151 236	9 151 236	9 151 236	**NA**
Average energy consumption per overnight stay (kWh or MJ per OS)	13,72	2,58	1,98	0,45	**NA**
Emission factors (kgCO2 per kWh or MJ)	0,334	0,074	0,063	0,101	**NA**
Average baseline GHG emissions per overnight stay (kgCO2)	4,58	0,19	0,13	0,05	**4,94**
Estimated annual GHG emissions (kt of CO_{2eq})	41,94	1,75	1,15	0,42	**45,24**
Expected annual growth rate in overnight stays by 2023					8,0 %

IN-COUNTRY TRAVEL BY CAR

Annual number of visiting tourists	1 264 163
Average in-country travel (kms)	200
Average CO2 emissions per visitor (kgCO2eq)	16,06
Estimated total annual GHG emissions (ktons of CO2eq)	**20,3**

AIRPORTS	Electricity (GWh)	Fuel oil for heating (TJ)	Motor fuels (TJ)	Total (ktons)
Current annual energy consumption of Podgorica and Tivat airports	4,979	-	2,5	
Emission factors (tCO2/GWh or tCO2/TJ)	334		74	
Annual GHG emissions (ktons of CO2)	**1,7**		**0,2**	**1,8**
Average GHG emissions per visitor (kgCO2/arrival)				2,75

CRUISE SHIPS

Average power demand of cruise ships when staying at ports	6	MW/ship
Average duration of stay	10	hours
Average power consumption per ship and visit	60	MWh
Emission factor of electricity generation by using ships' own engines	0,796	tCO2 per MWh
Number of visiting ships in 2012	348	
Total estimated annual power consumption of cruise ships at ports	20 880	MWh
Total estimated annual CO2 emissions of cruise ships at ports	**16,6**	**ktons of CO2**

Table 8.3. ESTIMATED CARBON FOOTPRINT OF DIFFERENT CATEGORIES OF TRAVELLERS

By air over the distance of 1 500 km for one week holiday	kt CO_2 total in 2012	Baseline estimate for 2023 (kt CO_{2eq})
Flights	242,19	522,87
Airports	1,85	3,99
In-country road travel	10,80	23,32
Accomodation and related services for 7 days	23,28	50,27
Total	**278,13**	**600,45**
Annual number of visitors	672 755	1 452 428

By road over the distance of 1 500 km for a one week holiday	kt CO_2 total in 2012	Baseline estimate for 2023 (kt CO_{2eq})
Travel to and from Montenegro	47,48	124,25
In-country road travel	9,50	24,85
Accomodation and related services for 7 days	20,47	53,56
Total	**77,45**	**202,67**
Annual number of visitors	591 408	1 547 572

Cruise visitors for a one day visit	kt CO_2 total in 2012	Baseline estimate for 2023 (kt CO_{2eq})
Sailing to and from Montenegro	24,41	34,74
Stay at the harbour for one day	16,62	23,66
Total	**41,03**	**58,40**
Annual number of visitors	244 084	347 408

Yachts	kt CO_2 total in 2012
Stay at the harbour (using shore power)	0,86
Total	**0,86**
Annual number of visitors	14 494

ESTIMATED TOTAL BASELINE GHG EMISSIONS FROM TOURISM	kt CO_2 in 2013	Baseline Estimate for 2023 (kt of CO_{2eq})
GHG emissions from international travel (bunker fuels)	330,71	705,53
Local GHG emissions with cruise ships' harbour emissions	83,38	179,65
TOTAL	**397,46**	**861,52**

ESTIMATED GHG REDUCTION POTENTIAL BY DIFFERENT MEASURES

ACCOMODATION	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024-2028
Estimated number of overnight stays (ONS) - thousands	9 883	10 674	11 528	12 450	13 446	14 522	15 684	16 938	18 293	19 757	98 784
Estimated average baseline GHG emissions ($kgCO_2$) per ONS	4,9	4,9	4,9	4,9	4,9	4,9	4,9	4,9	4,9	4,9	4,9
Estimated GHG reduction potential (%)	5 %	10 %	15 %	20 %	25 %	30 %	35 %	40 %	45 %	50 %	50 %
Estimated annual GHG reduction potential per ONS ($kgCO_2$)	0,25	0,49	0,74	0,99	1,24	1,48	1,73	1,98	2,22	2,47	2,47
Estimated annual GHG reduction potential ($ktCO_2$)	2,44	5,28	8,55	12,31	16,62	21,54	27,14	33,50	40,70	48,84	244
Estimated cumulative GHG reduction potential ($ktCO_2$)	2,44	7,72	16,27	28,58	45,20	66,74	93,88	127,38	168,08	**217**	**461**

CRUISE SHIPS		
Average power demand of cruise ships when staying at ports	6	MW/ship
Average duration of stay	10	hours
Average power consumption per ship and visit	60	MWh
Emission factor of electricity generation by using ships' own engines	0,796	tCO2 per MWh
Emission factor of grid-electricity	0,334	tCO2 per MWh
Share of complementary on-site RE generation of total consumption	50 %	
Combined alternative emission factor	0,167	tCO2 per MWh
GHG reduction potential per ship and visit	37,7	tCO2
Number of visiting ships in 2012	348	
Total estimated annual power consumption of cruise ships at ports	20 880	MWh
Total estimated annual CO2 emissions of cruise ships at ports	16,6	ktons of CO2
Estimated CO2 emissions per passenger	68	kgCO2/passenger
Share of ships equipped for shore electricity	10 %	
Annual GHG reduction potential as of 2012	1,3	ktons of CO2
Estimated annual growth rate in the number of visiting ships equipped for shore electricity	5 %	
GHG reduction potential over next 20 years (tCO2eq)	34,9	tons of CO2
Typical investment for shore power supply (without power generation)	5-10	million euros
Power generation with PV	10	million euros

RENEWABLE ENERGY BASED POWER SUPPLY FOR KOTOR - CETINJE CABLE CAR FOR 4 AND 7 MONTHS OPERATING PERIODS	Option 1 (4 months)	Option 2 (7 months)
Average annual power consumption (MWh)	1 286	1 822
Grid emission factor (tCO2/MWh)	0,334	0,334
Annual baseline GHG emissions (tCO2)	429,52	608,55
Share of renewable energy (in alternative)	100 %	100 %
Estimated annual GHG reduction potential (tCO2)	**430**	**609**
GHG reduction potential over 20 years (tCO2)	**8 590**	**12 171**

LOW CARBON AIRPORTS	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024-2028**
Estimated growth in number of passengers	8 %	8 %	8 %	8 %	8 %	8 %	8 %	8 %	8 %	8 %	
Estimated no. of arriving passengers (1,000)	727	785	847	915	988	1 068	1 153	1 245	1 345	1 452	7 262
Estimated baseline CO2 emissions ($ktCO_2$)	2,0	2,2	2,3	2,5	2,7	2,9	3,2	3,4	3,7	4,0	
Estimated GHG reduction potential (%) by project supported activities	5 %	10 %	15 %	20 %	25 %	30 %	35 %	40 %	45 %	50 %	
Est. Annual GHG reduction potential ($ktCO_2$)	0,1	0,2	0,3	0,5	0,7	0,9	1,1	1,4	1,7	2,0	**10,0**
Cumulative GHG reduction potential ($ktCO_2$)	0,1	0,3	0,7	1,2	1,8	2,7	3,8	5,2	6,9	**8,9**	**18,8**
SHORE POWER FOR CRUISE SHIPS	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	
Estimated growth in no. of visiting cruisers	4 %	4 %	4 %	4 %	4 %	4 %	4 %	4 %	4 %	4 %	
Estimated number of visiting cruisers	362	376	391	407	423	440	458	476	495	515	
Estimated baseline CO2 emissions ($ktCO_2$)	17,3	18,0	18,7	19,4	20,2	21,0	21,9	22,7	23,7	24,6	
Estimated GHG reduction potential (%) by project supported activities	0 %	0 %	0 %	10 %	20 %	30 %	35 %	40 %	45 %	50 %	
Est. Annual GHG reduction potential ($ktCO_2$)	0,0	0,0	0,0	1,9	4,0	6,3	7,7	9,1	10,6	12,3	61,5
Cumulative GHG reduction potential ($ktCO_2$)	0,0	0,0	0,0	1,9	6,0	12,3	20,0	29,1	39,7	**52,0**	**113,5**
SHORE POWER FOR YACHTS	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	
Estimated growth in no. of visiting vessels	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	
Estimated number of visiting vessels	3 286	3 614	3 976	4 373	4 811	5 292	5 821	6 403	7 043	7 748	
Estimated baseline CO2 emissions ($ktCO_2$)	0,9	1,0	1,1	1,3	1,4	1,5	1,7	1,8	2,0	2,2	
Estimated GHG reduction potential (%) by project supported activities	0 %	0 %	0 %	10 %	20 %	30 %	35 %	40 %	45 %	50 %	
Est. Annual GHG reduction potential ($ktCO_2$)	0,0	0,0	0,0	0,1	0,3	0,5	0,6	0,7	0,9	1,1	5,6
Cumulative GHG reduction potential ($ktCO_2$)	0,0	0,0	0,0	0,1	0,4	0,9	1,4	2,2	3,1	**4,2**	**9,8**
NEW TRAVEL CORRIDORS FOR NMT	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	
Estimated % growth in number of users			8 %	8 %	8 %	8 %	8 %	8 %	8 %	8 %	
Estimated annual use (1000 passenger-km)			500	540	583	630	680	735	793	857	
Estimated baseline CO2 emissions ($ktCO_2$)			0,04	0,04	0,05	0,05	0,05	0,06	0,06	0,07	
Estimated GHG reduction potential (%) by project supported activities			100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	
Est. Annual GHG reduction potential ($ktCO_2$)			0,04	0,04	0,05	0,05	0,05	0,06	0,06	0,07	0,34
Cumulative GHG reduction potential ($ktCO_2$)			0,0	0,1	0,1	0,2	0,2	0,3	0,4	**0,4**	**0,77**
RE DRIVEN KOTOR - CETINJE CABLE CAR	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	
Annual baseline emissions (opt. 1) $ktCO_2$			0,43	0,43	0,43	0,43	0,43	0,43	0,43	0,43	
Annual baseline emissions (opt. 2) $ktCO_2$			0,61	0,61	0,61	0,61	0,61	0,61	0,61	0,61	
Est. GHG reduction potential opt. 1 (ktCO2)			0,43	0,43	0,43	0,43	0,43	0,43	0,43	0,43	2,15
Est. GHG reduction potential opt. 2 (ktCO2			0,61	0,61	0,61	0,61	0,61	0,61	0,61	0,61	3,04
Cumulative GHG reduction, opt. 1 (ktCO2)			0,4	0,9	1,3	1,7	2,1	2,6	3,0	**3,4**	**5,58**
Cumulative GHG reduction, opt. 2 (ktCO2)			0,6	1,2	1,8	2,4	3,0	3,7	4,3	**4,9**	**7,91**

Annex 8.6 Complementary Barrier and Risk Analysis

1. Need for effective national coordination

Since the 1990s virtually every national tourism master plan has aspired to be sustainable. However tourism is a notoriously fragmented industry and many actual actions directed at a sustainable tourism development are taken at the so-called lower levels: Action committees concentrate on a certain development matter, while other harmful effects are ignored. Sustainable development often lacks clear problem definition and instructions for their solutions. Financial means are often lacking, as well as slow decision making (too many parties involved), lack of regulations and laws, knowledge gaps, manpower and the communication of relevant information. Local action committees, non-governmental organisations (NGOs) and pressure groups may form a very important lobby for the sustainable development of a region, but they rarely deliver coordinated national action.[66]

While Montenegro has clearly signalled its attention to become a sustainable tourism destination, progress towards this has been patchy and there are many unsustainable practices including poor energy management, erratic controls on development and extreme seasonality.

Stronger industry leadership and strategic policy direction are needed. The *Montenegro Investment Opportunities Guide* for example does not highlight environmental impact assessments or mention green building regulations. *Publication from September 2011, "Program mjera za podsticanje izgradnje hotelskih kompleksa i privlačenje hotelskih investitora i poznatih svjetskih brendova"*, sees hotel development rather than environmental protection as the national priority regarding quality:

> *The development of new high-quality accommodation, which now small in number, and increasing the share of total hotel capacity is the main objective that will enable an increase in the quality of tourism. There are only 226 hotels, and the ratio of first class and secondary accommodation is 21:79. There is lack of support facilities and services (wellness / spa facilities and conference facilities, etc.) for high-paying clientele, with a year round offer. In contrast, many hotels offer only basic accommodation and food. Despite investment therefore remains a great need to create hotel with fuller facilities (2011: 4).*

The NTO has a marketing role but not an effective product development one. Municipalities do not always work together. Policy regarding low carbon issues is unclear. The proposed project offers an opportunity to address these problems.

2. Traditional emphasis on spreading tourism

Historically there have been a number of studies and NGO programmes on the challenges of developing mountain tourism in Montenegro, for example MTE's 2005 "*Program razvoja planinskog turizma u Crnoj Gori",* the United States Agency for International Development's (USAID), *Economic Growth Project*, or the Austrian Development Corporation's (ADC) *Montenegro Country Strategy 2010-2012,* which focuses on the challenges of the North. The main carbon mitigation measures for tourism are however undoubtedly needed on the coast, where the vast bulk of tourism plant is. Here an integrated strategy for addressing traffic congestion, building standards, waste disposal, cruise tourism management and green energy for predicted tourism growth and predicted climate change is needed. The proposed project offers an opportunity to address these carbon-related issues.

[66] http://www.tourismtheories.org/?p=958

3. Lack of realistic solutions to road traffic congestion along the coast in summer

The coastal zone suffers from severe traffic congestion and car and bus exhaust pollution which is difficult to realistically address. This undermines any claim that Montenegro is a low carbon destination.

4. Unwillingness to recognise and address carrying capacity issues

A lack of political will to constrain the numbers of tourists visiting a particular location can damage natural capital, sometimes irreversibly. In addition, threats from growing pollution; competing uses and poor management of the tourism resource may jeopardise the growth of the tourism industry. On the other hand, the value of areas high in biodiversity and wildlife will increase over time, as demand increases and supply falls. This issue is particularly evident in Kotor where increasing numbers of cruise passengers cause social and environmental issues, as noted by UNESCO. In addition there are health issues arising from cruise liners' use of heavy fuel oil in the confined Bay of Kotor, in addition to possible damage to WHS properties by constant ship engine vibrations.

5. Limited understanding of low carbon issues

Low carbon tourism is a relatively obscure concept in most countries, not only in Montenegro. Awareness of the issue is certainly very low in Montenegro and there are no low carbon communities at present. There is also low awareness in the tourism industry, even regarding such issues as eco-certification. These are all issues which the programme will need to address.

6. Possible unwillingness of industry to engage with programme

Addressing low carbon tourism will require commitment and investment, but at present the industry probably lacks awareness of savings that can be made to cover investment costs. This, together with a possible general reluctance to re-invest, may result in lack of engagement.

7. Depressed market for carbon trading

The carbon market is currently foundering, with very low prices undermining returns and reducing the demand for carbon credits, so further carbon finance through these mechanisms is currently not promising. Things may improve over time as international mitigation gathers pace, but in the short to medium term this looks more likely to happen through unilateral, perhaps regional, approaches rather than through an internationally coordinated climate change agreement and carbon market (Ellis 2013). This is also an opportunity for this programme.

8. Conflicts of interest

Conflicts of interest are likely to arise in the area of encouraging low cost tourism. Examples are as follows:

- Hotels wish to offer guests luxury facilities: This may include providing constant air conditioning in summer, or individual pick-up from airports, etc.
- The tourism industry in general wishes to see more tourists and this is also Government policy. This is likely to result in encouraging more cars, more flights from both near and distant markets, more cruise liners and more loss of habitat as the industry expands.
- The tourism industry, while claiming interest in reducing carbon emissions, is sometimes unwilling to invest in desirable carbon emission reduction practices.

- Municipalities may also encourage more and more tourism, exceeding carrying capacities (particularly an issue in the WHS), especially where there are financial interests at stake such as port revenues from cruising.
- A conflict between setting aside lands for conservation ('carbon sinks') and allowing land to be developed for other tourism can exist.

9. Opportunity costs

There are significant opportunity costs in terms of the development potential of other sectors due to high energy and water usage in tourist resorts, and the loss of finite resources for tourism purposes, such as agricultural, forest and wilderness land. These opportunity costs are likely to be exacerbated by climate change and further tourism development. For example, access to beaches could be threatened by resort developments (this does not appear to be a major problem at present). Another example is tourism development and land speculation in tourist areas: This practice often favours foreigners (non-locals) and rising real estate prices are the usual consequence. This can have disastrous effects on local economies and social structures, but there is rarely talk of trying to stop it (Ellis, 2013). This is particularly relevant to the pilot area.

10. Market confusion

Tourism in particular presents a confusion of eco-labels to the consumer. The website (http://www.ecolabelindex.com/ecolabels) lists 47 active tourism eco-labels for example. Care and investment in marketing is needed if a Montenegrin eco-label for tourism is introduced.

11. Market resistance to carbon offset

Montenegro's main inbound tourism source markets are its neighbours (of whom the largest by far is Serbia), Russia, Ukraine and Poland. There may be limited willingness to pay a carbon offset charge in these markets. Germany is the largest Western European market for Montenegro but only accounts for 2.3% of overnight stays. Returns from a voluntary carbon offset scheme may be very modest.

12. Credibility

Perhaps the greatest barrier to the promotion of Montenegro as a zero or even a low carbon destination is tourist scepticism and the danger of being seen as 'green wash'. Unless real problems are addressed - airports, cruise liners, and the main accommodation hotspots (in particular Budva were 45% of tourist overnights take place) together with the perennial problem of dumping in scenic areas, - Montenegro cannot credibly claim to be a low carbon tourism destination.

Annex 8.7 UNDP Environmental and Social Screening Report (REFER TO SEPARATE FILE)

Annex 8.8 Tracking Tool for Climate Change Mitigation Projects (REFER TO SEPARATE FILE FOR TRACKING TOOL FOR CLIMATE CHANGE MITIGATION PROJECT)