



**BURKINA FASO**

**NATIONALLY DETERMINED  
CONTRIBUTION (NDC) OF BURKINA  
FASO**

**2021-2025**

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## ACRONYMS AND ABBREVIATIONS

<b>AFOLU</b>	: Agriculture, Forestry and Other Land Uses
<b>ANAM</b>	: National Meteorological Agency
<b>CROSSBEAM</b>	: Business As Usual
<b>BNDT</b>	: National Topographic Database
<b>CAEP</b>	: Climate Action Enhancement Package
<b>UNFCCC</b>	: United Nations Framework Convention on Climate Change
<b>CDN</b>	: Nationally Determined Contribution
<b>THIS</b>	: Landfill site
<b>DIC</b>	: Integrated Waste Recovery Centre
<b>CN</b>	: National Communication
<b>CO<sub>2</sub>eq</b>	: Carbon Dioxide Equivalent (CO <sub>2</sub> Equivalent)
<b>INDCs</b>	: Intended Nationally Determined Contribution
<b>DGESS</b>	: Directorates-General for Sectoral Studies and Statistics
<b>EX-ACT</b>	: EX-Ante Carbon-balance Tool
<b>FAARF</b>	: Support Fund for Women's Income-Generating Activities
<b>FAO</b>	: Food and Agriculture Organization of the United Nations
<b>FIE</b>	: Environmental Intervention Fund
<b>GACMO</b>	: Greenhouse Gas Abatement Cost Model
<b>GHG</b>	: Greenhouse Gases
<b>Gg</b>	: Giga Gram
<b>GGGI</b>	: Global Green Growth Institute
<b>IPCC</b>	: Intergovernmental Panel on Climate Change
<b>HDI</b>	: Human Development Index
<b>IGB</b>	: Geographical Institute of Burkina Faso
<b>IPCC</b>	: Intergovernmental Panel on Climate Change
<b>MEEVCC</b>	: Ministry from the environment, from The economy Green and of the Climate change
<b>MRV</b>	: Measurement, reporting, verification
<b>MW</b>	:Megawatt
<b>MWp</b>	: Megawatt-peak
<b>NAMAs</b>	: Nationally Appropriate Mitigation Actions

<b>ODD</b>	: Sustainable Development Goals
<b>NGO</b>	: Non-Governmental Organization
<b>PANA</b>	: National Action Programme for Adaptation to Variability and Variations Climate Change
<b>GDP</b>	: Gross Domestic Product
<b>PIUP</b>	: Industrial Processes and Product Use
<b>LDC</b>	: Least Developed Countries
<b>PNA</b>	: National Climate Change Adaptation Plan
<b>UNDP</b>	: United Nations Development Programme
<b>UNEP</b>	: United Nations Environment Programme
<b>RCM</b>	: Regional Climate Model
<b>RGPH</b>	: General Population and Housing Census
<b>SP/CNDD</b>	: Permanent Secretariat of the National Council for Sustainable Development
<b>SP/CONEDD</b>	: Permanent Secretariat of the National Council for the Environment and the Sustainable development

## FOREWORD

Burkina Faso, with the ratification of the Paris Agreement on climate change, has resolutely committed to reducing its greenhouse gas (GHG) emissions while strengthening the resilience of its populations to climate change. To this end, the country has made a commitment, in its Nationally Determined Contribution (NDC) for the period 2015-2020, to reduce its GHG emissions by 21,574.63 Gg by 2030, or 18.2% compared to the reference scenario. The NDC assessment identified an overall reduction of 46399.57 Gg through the implementation of mitigation and adaptation actions planned for this purpose. This result convinces Burkina Faso that a more sustained commitment to support the implementation of adaptation and resilience actions is a guarantee of combining the imperatives of reducing GHG emissions with those of strengthening the resilience of vulnerable populations and sectors.

In this NDC, the development of which was intended to be participatory and inclusive of all stakeholders in the fight against climate change, the Burkinabe State commits to reducing its GHG emissions by 31682.3Gg by 2030, i.e. 29.42% by 29.42% by 29.42% compared to the baseline scenario. The implementation of adaptation actions could also allow a reduction of 33072.72 Gg or 30.76% compared to the reference scenario. The overall cost of this NDC is US\$ 4,124,231,753, of which US\$ 2,527,863,277 is to be sought.

Burkina Faso, for the development of this framework, has benefited from the support of the members of the NDC Partnership. These include the Global Green Growth Institute (GGGI), the United Nations Development Programme (UNDP), the Belgian Federal Government, the Food and Agriculture Programme of the United Nations (FAO), the Dutch Cooperation (SNV), Climate Analytics, German Cooperation through GIZ, United Nations Environment Programme (UNEP). On behalf of the Government, I would like to thank all these technical and financial partners whose contribution has enabled Burkina Faso to have an NDC with more ambitious commitments than the one in 2015. I am also grateful to civil society and the private sector, whose mobilization alongside the State has made it possible to strengthen the participatory and inclusive nature of the development of this NDC.

The Burkinabe State reiterates its commitment to do everything possible with the support of its partners to achieve the quantified objectives contained in this NDC.



**Siméon SAWADOGO**  
Officier de l'Ordre de l'Étalon

# NDC PARTNERSHIP





## EXECUTIVE SUMMARY

Burkina Faso, which is very vulnerable to the effects of climate change, has chosen to contribute to the global effort to stabilize greenhouse gas (GHG) concentrations in the atmosphere. This commitment has materialized through the ratification of the United Nations Framework Convention on Climate Change, the Kyoto Protocol to the Convention and the Paris Agreement on Climate Change. The country reflected its commitment to reducing GHG emissions by submitting its Intended Nationally Determined Contribution (INDC) on 23 October 2015, which subsequently became its Nationally Determined Contribution (NDC) following its ratification of the Paris Climate Agreement. This first NDC set GHG emission reduction targets for 2030 of 21,574.63 Gg CO<sub>2</sub>eq, or 18.2% compared to the baseline scenario (Business As Usual) for mitigation actions, and 43,707 Gg CO<sub>2</sub>eq, or 36.95% through the implementation of adaptation actions. For the period 2015 to 2020, Burkina Faso planned a reduction of 5133 Gg CO<sub>2</sub>eq representing 5.58% in the unconditional scenario and 10953 Gg CO<sub>2</sub>eq or 11.9% in the conditional scenario for mitigation actions.

The NDC assessment in 2020 shows a reduction of 4,858.07 Gg CO<sub>2</sub>eq, or 5.3% of the unconditional scenario, and 2,643.5 Gg CO<sub>2</sub>eq, or 2.9% of the conditional scenario. The level of achievement of the commitment for the period 2015 to 2020 is 91.37% for the unconditional scenario and 24.36% for the conditional scenario. With regard to adaptation actions, the country's commitment in terms of GHG reduction, which amounted to 43,707 Gg CO<sub>2</sub>eq in 2030, was able to reach a level of achievement of 89% in 2020, i.e. a reduction of 38,898 Gg CO<sub>2</sub>eq of GHGs. Burkina Faso, thanks to the implementation of adaptation actions, has been able to meet its commitments to reduce its GHG emissions by 2025. This situation further convinces the country that the financing of its adaptation actions is a source of greenhouse gas emissions. The low level of achievement of the conditional scenario is explained by the difficulties encountered in resource mobilization.

Article 4 of the Paris Climate Agreement provides for an upward revision of the parties' reduction ambitions every five years. To meet this requirement, the country began the process of revising its NDC at the end of 2019. This review led by the Permanent Secretariat of the National Council for Sustainable Development (SP/CNDD) was made possible thanks to the support of the NDC Partnership and its partners, the United Nations Development Programme (UNDP), the Global Green Growth Institute (GGGI), the Netherlands Development Organization (SNV), the German Cooperation (GIZ), Climate Analytics, the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Environment Programme (UNEP). Burkina Faso has also adopted a participatory and inclusive approach to the revision of its NDC through the involvement of public, private, NGOs and associations at the central, deconcentrated and decentralized levels.

Following the assessment of its first NDC to identify strengths and weaknesses, the country has carried out several activities to make its new NDC more sustainable.

ambitious, realistic, measurable, reportable and verifiable. These include (i) the assessment of the GHG sequestration potential of NDC sectors; (ii) the estimation of the costs and benefits of the different adaptation and mitigation actions envisaged in the new NDC; (iii) the definition of the targets and indicators of the actions selected for the NDC; (iv) alignment of adaptation and mitigation actions with the country's priority SDGs; (v) the inclusion of gender and nature-based solutions in the NDC; (vi) the development of gender-sensitive NDC Sectoral Plans.

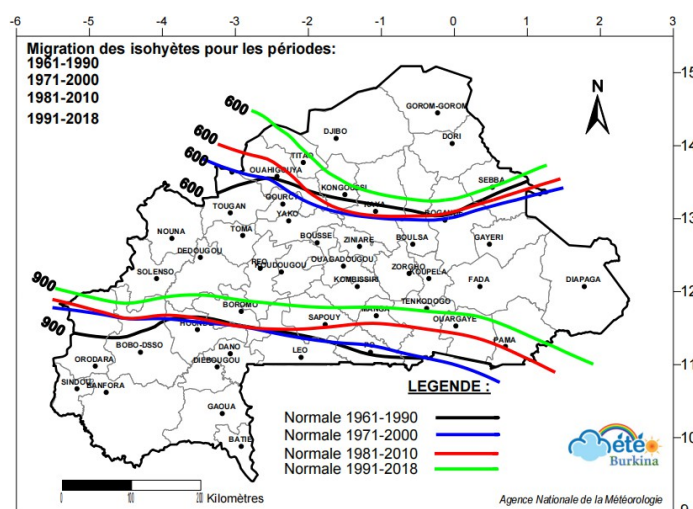
Burkina Faso, as part of its new ambitions, has considered an unconditional scenario and a conditional scenario. The country commits, in relation to its mitigation actions, to reduce its GHG emissions by 31682.3 Gg CO<sub>2</sub>eq by 2030, i.e. 29.42% compared to the Business As Usual scenario. This commitment is 21074.94 Gg CO<sub>2</sub>eq for the unconditional scenario, i.e. 19.60%, and 10557.91 Gg CO<sub>2</sub>eq for the conditional scenario, i.e. 9.82%. Compared to the 2015 NDC of 18.2%, the Burkinabe state has raised its ambitions by 11.22%. To achieve this objective of 29.42%, an amount of US\$449,118,465.3 is planned under the unconditional scenario against an amount of US\$885,670,522 expected for the conditional scenario, i.e. a total amount of US\$1,334,788,987.

In addition, the country has taken the option of strengthening its adaptation and resilience through the implementation of actions whose GHG emission reduction potential is estimated at 33072.72 Gg CO<sub>2</sub>eq, i.e. 30.76% compared to the Business As Usual scenario. This potential is divided into unconditional scenario (20.67%) and conditional scenario (10.08%). The implementation of the actions of the unconditional scenario is in the amount of US\$ 1,147,250,011 against US\$ 1,640,812 \$US 864 for the conditional scenario, for a total amount of US\$2,788,062,875.

The assessment of the financial needs for the implementation of the NDC amounts to US\$ 4,124,231,753 of which US\$ 1,596,368,476 has already been acquired and US\$ 2,527,863,277 is to be sought. The gender-specific actions included in the amount to be sought is US\$1,379,891.

## I. NATIONAL CONTEXT

Burkina Faso is a Sahelian country in West Africa. It is located between 9°20' and 15°05' north latitude, 5°20' west longitude and 2°03' east longitude and covers an area of 273,187 km<sup>2</sup> (BNDT/IGB, 2012). Its population is estimated at 20,487,979 inhabitants, with an average density of 74 inhabitants per km<sup>2</sup>, according to the 2019 General Population and Housing Census (RGPH). Rural areas are home to 73.7 per cent of the national population, which lives mainly from the exploitation of natural resources. The GDP growth rate averaged 6.2% per year between 2016 and 2019 and the incidence of poverty fell somewhat, from 40.1% in 2014 to 36.2% in 2018 according to the second National Economic and Social Development Plan (PNDES II). The climate is Sudanian, with rainfall, very variable and irregular, which decreases from the south-west to the north, alternating between a long dry season (October to May) and a short rainy season (June to September). The temperature is also very variable depending on the seasons of the year, with strong diurnal amplitudes. These climatic disturbances result in a migration of isohyets and isotherms. The mean annual temperature has been on an upward trend over the period 1961-2018 at all the country's synoptic stations and the 600 and 900 mm isohyets have migrated considerably (Figure 1).



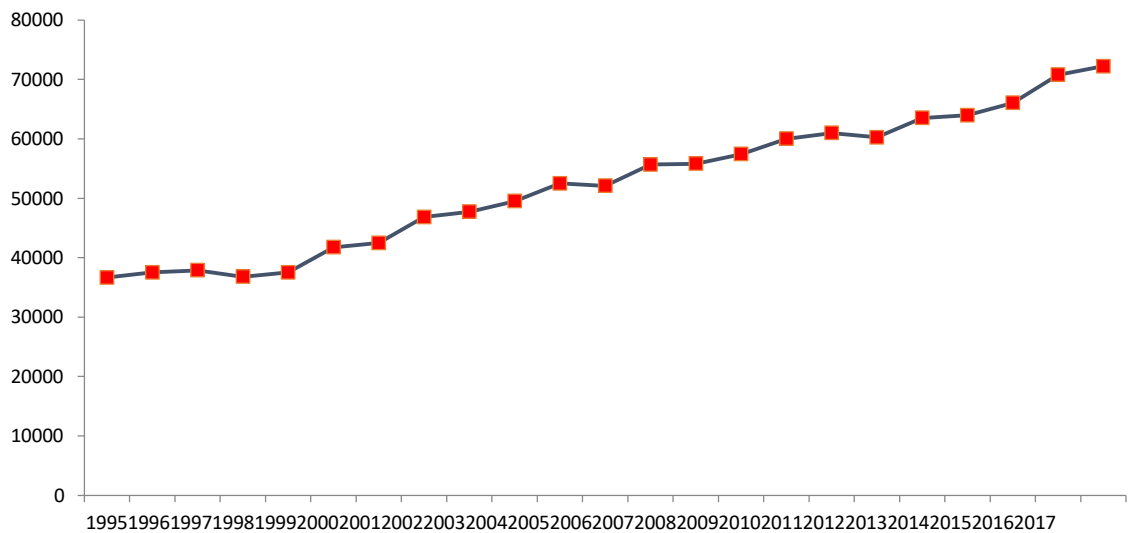
**Figure 1: Isohyet migration**

*Source: National Meteorological Agency*

The projected climate risks indicate that for Burkina Faso, climate variability and change will have significant and certain negative impacts on key socio-economic sectors of development, such as agriculture, livestock, fisheries, etc.

exploitation of forest products, etc. In this context of climate vulnerability, the achievement of the country's Sustainable Development Goals (SDGs) could be severely compromised with an impact on gender inequalities, due to the national economy, which is essentially based on the primary sector.

National GHG emissions in Burkina Faso have been on an upward trend between 1995 and 2015. Indeed, emissions have increased from 36,648 Gg CO<sub>2</sub>eq in 1995 to more than 66,000 Gg CO<sub>2</sub>eq in 2015, an increase of 80%.



**Figure 2: Evolution of national GHG emissions in Gg CO<sub>2</sub> equivalent from 1995 to 2017**  
*Source: National GHG Inventory, 2021*

The increase in national GHG emissions is observed in all sectors covered by the national GHG emissions inventory. Emissions from the Agriculture, Forestry and Other Land Use (AFOLU) sector increased by 69%, those from the Energy sector by 8%, Waste 2% and Industrial Process and Chemical Use (IPPP) 1%.

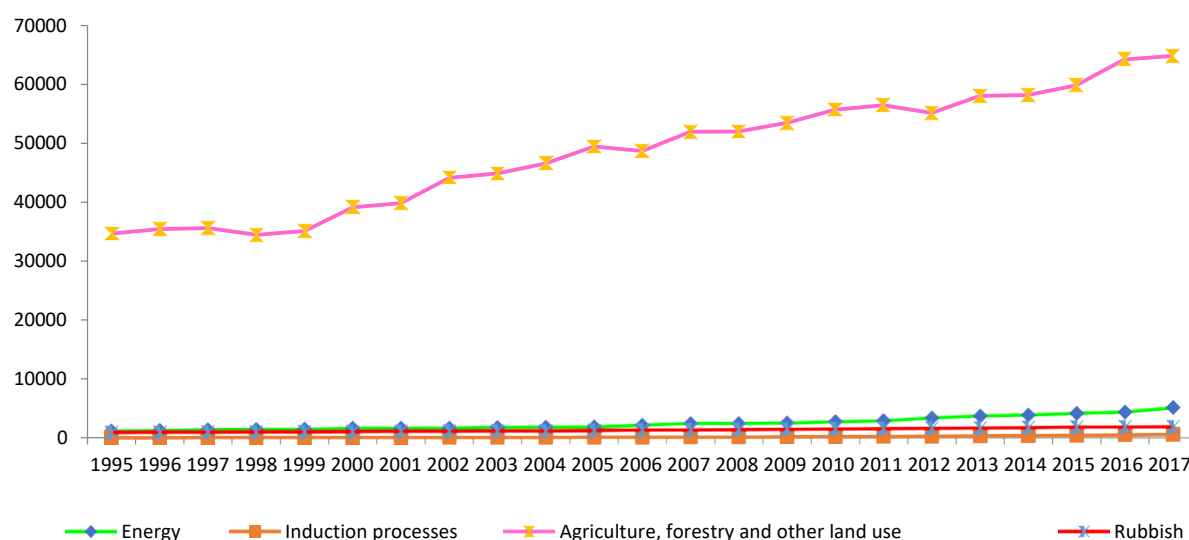
**Table 1: GHG emissions in Gg CO<sub>2</sub>eq**

Sectors	1995	2015	Progress (%)	Rate Annual (%)	2025 projection	2030 projection	2050 projection
Energy	1 115,45	4 035,42	262	6	7 226,82	10 110,53	31 016,58
Industrial processes	9,04	404,64	4378%	2	2 505,42	6 114,89	239 007,99
Agriculture, forestry and others Land Use (AFOLU)	34 645,86	59 832,82	73	3	80 410,31	88 395,68	168 361,32
Rubbish	877,18	1 762,63	101	3	2 368,83	2 901,61	4 959,79
National	<b>36 647,52</b>	<b>66 035,51</b>	<b>80</b>	<b>3</b>	<b>92 511,38</b>	<b>107 522,71</b>	<b>185814,84</b>

*Source: National GHG Inventory, 2021 adapted.*

The increases in emissions can be explained by the increase in agricultural areas, the decrease in forest land and the increase in livestock numbers, among other things.

Over the period 1995 to 2015, the AFOLU sector's contribution to national GHG emissions is at least 90%.



**Figure 3: Evolution of national GHG emissions from the sectors from 1995 to 2017.**

*Source: National GHG Inventory, 2021*

By doing an analysis of GHG emissions by sector, the AFOLU sector emitted 34,645.86 Gg CO<sub>2</sub>eq in 1995 and 59,832.82 Gg CO<sub>2</sub>eq in 2015, an increase of 73%. If this

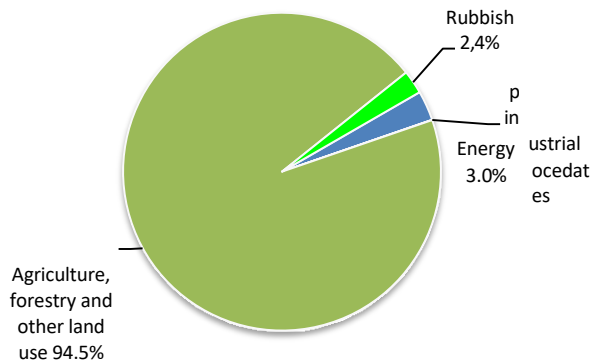
trend continues, this sector, in 2030, will emit 88,395.68 Gg CO<sub>2</sub>eq and 168,361.32 Gg CO<sub>2</sub>eq in 2050.

In the energy sector, GHG emissions have increased from 1,115.45 Gg CO<sub>2</sub>eq in 1995 to 4,035.42 Gg CO<sub>2</sub>eq in 2015. By maintaining the rate of growth of 2.62 in 2030, this sector will emit 10,110.53 Gg CO<sub>2</sub>eq and 31,016.58 Gg CO<sub>2</sub>eq in 2050.

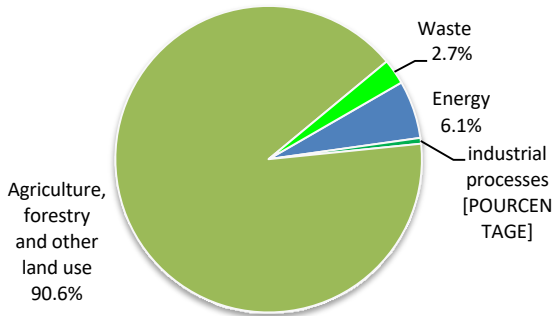
As for the Waste sector, emissions increased from 877.18 Gg CO<sub>2</sub>eq in 1995 to 1,763.63 Gg CO<sub>2</sub>eq in 2015, representing an increase of 1.01. At this rate, this sector will emit 2,901.61 Gg CO<sub>2</sub>eq in 2030 and 2050, an amount of 4,959.79 Gg CO<sub>2</sub>eq.

As for the PIUP sector, although GHG emissions are low, it has recorded a strong growth rate of 4,378% from 9.04 Gg CO<sub>2</sub>eq in 1995 to 404.64 Gg CO<sub>2</sub>eq in 2015. Following this trend, the IPPU sector will emit 6,115 Gg CO<sub>2</sub>eq in 2030 and in 2050 an amount of emissions of 239,007.99 Gg CO<sub>2</sub>eq.

In 1995, the main GHG emitting sectors were the agriculture, forestry and other land use sector (94.5%), the energy sector (3.0%), the waste sector (2.4%) and finally the industrial process sector with less than 0.1% of total emissions.



**Figure 4: Distribution of GHG emissions by sector in 1995**



**Figure 5: Distribution of GHG emissions by sector in 2015**

*Source: National GHG Inventory, 2021*

In a global analysis, we note that in 2015, the weight of the AFOLU sector (90.6%) in total national GHG emissions decreased slightly. In contrast, the energy (6.1%) and industrial process (0.6%) sectors increased. GHG emissions at

through the waste sector remained almost stable (2.7%). Total national GHG emissions could reach 107,522.71 Gg CO<sub>2</sub>eq in 2030 and 443,345.59 Gg CO<sub>2</sub>eq in 2050. The increase in GHG emissions in the two sectors (energy and industrial processes) is justified by the country's ongoing industrialization and the increase in the number of vehicles.

Among the GHGs emitted in Burkina Faso, CO<sub>2</sub>, which represented 62% in 1995, rose to 66% in 2015. As for CH<sub>4</sub>, its contribution to emissions has increased from 21% in 1995 to 20% in 2015. N<sub>2</sub>O emissions decreased between 1995 (17.02%) and 2015 (14%). Finally, HFCs contribute to less than 1% of GHGs.

In its first NDC, Burkina Faso set its GHG reduction targets of 21,574.63 Gg CO<sub>2</sub>eq by 2030, or 18.2% compared to the Business As Usual scenario for mitigation actions, and 43,707 Gg CO<sub>2</sub>eq, or 36.95% through the implementation of adaptation actions. For the period 2015 to 2020, Burkina Faso planned a reduction of 5.58% in the unconditional scenario and 11.9% in the conditional scenario for mitigation actions.

The NDC assessment in 2020 shows a reduction of 4,858.07 Gg CO<sub>2</sub>eq, or 5.3% of the unconditional scenario, and 2,643.5 Gg CO<sub>2</sub>eq, or 2.9% of the conditional scenario. The level of achievement of the commitment for the period 2015 to 2020 is 91.37% for the unconditional scenario and 24.36% for the conditional scenario. The low level of achievement of the conditional scenario is explained by the difficulties encountered in mobilizing resources. With regard to adaptation actions, the country's GHG reduction commitment, which amounted to 43,707 Gg CO<sub>2</sub>eq in 2030, was able to reach a level of achievement of 89% in 2020, i.e. a reduction of 38,898 Gg CO<sub>2</sub>eq of GHGs. In addition, the evaluation showed that gender mainstreaming in some of the projects reported remains low. Women sometimes represented between 17 and 52% and young people 22 and 27% of the beneficiaries.

## **II. METHODOLOGICAL APPROACH**

The revision of Burkina Faso's NDC, coordinated by the SP/CNDD, received technical and financial support from the NDC Partnership's Climate Action Enhancement Package (CAEP) and UNDP's Climate Promise. Several Technical and Financial Partners, members of the CAEP have mobilized alongside the Government of Burkina Faso

as part of this review. These include SNV, UNDP, GGGI, FAO, GIZ, Climate Analytics, and UNEP.

In order to enable Burkina Faso to have a more ambitious, relevant and realistic NDC, the inclusive and participatory approach has been adopted for the involvement of all actors from the public, the private sector, NGOs and associations, at the central, deconcentrated and decentralized levels. A communication to the Council of Ministers has been made to this effect.

This revision, it should be recalled, is based on Article 4 of the Paris Agreement, which invites the Parties to the Agreement to communicate a new NDC every five years with an ambition to reduce GHG emissions upwards.

The first activity of this review was the qualitative and quantitative evaluation of Burkina Faso's first NDC. It made it possible to identify the strengths and weaknesses of this NDC and to formulate recommendations with a view to improving the clarity, transparency and understanding of Burkina Faso's new NDC. Several activities have been identified for inclusion in the new NDC and stem from the country's policy, plan and strategy documents, projects and programmes.

The setting of new mitigation and adaptation commitments in the new NDC has seen the completion of several activities. These activities included:

- assessment of the GHG mitigation potential of NDC sectors using the revised IPCC 2006, EX-ACT, GACMO tools;
- the estimation of the costs and benefits of the various adaptation and mitigation actions envisaged in the new NDC for projects and programmes in the AFOLU and energy sectors (other projects were not subject to this assessment, but the socio-economic benefits linked to their implementation were highlighted);
- the definition of the targets and indicators of the actions selected for the NDC;
- the study on the alignment of adaptation and mitigation measures with Burkina Faso's priority SDGs;
- the study on the inclusion of nature-based solutions in the NDC;
- gender analysis in the priority sectors of the NDC;
- the development of gender-sensitive NDC Sectoral Plans;
- the production of a synthetic NDC taking into account the different deliverables;



- the validation of the NDC in a national workshop, its examination by the National Development Planning Commission, its adoption by the Council of Ministers and its submission to the Executive Secretariat of the UNFCCC;
- capitalization of the NDC revision process.

### III. BURKINA FASO'S GHG EMISSION REDUCTION AMBITIONS

The main greenhouse gases introduced into the atmosphere by human activities in Burkina Faso are:

- **Carbon dioxide (CO<sub>2</sub>):** it is the most abundant greenhouse gas and comes mainly from the use of fossil fuels, certain industrial activities, deforestation and forest degradation and certain agro-pastoral practices.
- **nitrous oxide (N<sub>2</sub>O):** it comes from the application of fertilizers on the soil in the context of agricultural activities in particular. It has a warming power 310 times higher than carbon dioxide.
- **methane (CH<sub>4</sub>):** it comes from enteric fermentation, ruminant digestion, landfills and wastewater treatment. It warms 21 times more than carbon dioxide.
- **F-gases :** These gases are used as refrigerants, electrical insulators or heat conductors. These are Chlorofluorocarbons (CFCs), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF<sub>6</sub>). HFCs are the industrial greenhouse gases considered in national GHG inventories in Burkina Faso. They are 1300 times warmer than carbon dioxide.

For the purposes of this NDC, the GHGs used are CO<sub>2</sub>, CH<sub>4</sub> and NO<sub>2</sub>.

Due to the high preponderance of CO<sub>2</sub> in the atmosphere compared to other greenhouse gases (GHGs), estimates in terms of emissions are conventionally made in CO<sub>2</sub>-eq.

#### 3.1. Overall contribution of NDC mitigation actions.

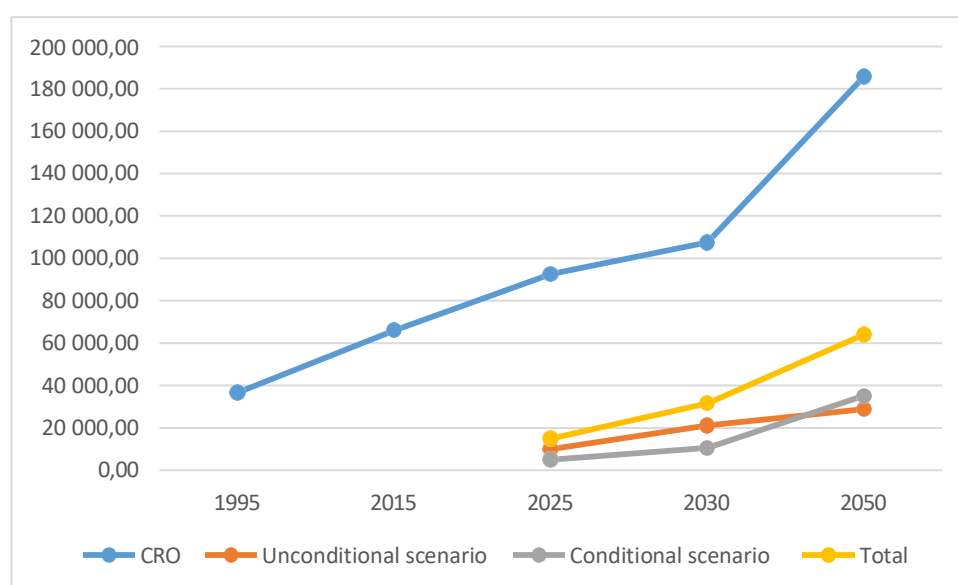
The contribution of the selected mitigation actions to the potential for reducing GHG emissions, both conditional and unconditional, is presented in Table 2. The GHG emission reduction potential is estimated in relation to the BAU, whose values are 92511.38 Gg CO<sub>2</sub>eq in 2025; 107,522.71 Gg CO<sub>2</sub>eq in 2030 and 185,814.84 Gg CO<sub>2</sub>eq in 2050.

**Table 2: Summary of GHG CO<sub>2</sub>eq reduction potential compared to the BAU scenario**

Scenarios	GHG reduction compared to BAU					
	2025		2030		2050	
	Gg CO <sub>2</sub> eq	%	Gg CO <sub>2</sub> eq	%	Gg CO <sub>2</sub> eq	%
Unconditional scenario	9965,96	10,77	21074,94	19,60	28803,78	15,50
Conditional scenario	5062,55	5,47	10557,91	9,82	35170,66	18,93
<b>Total</b>	<b>15028,51</b>	<b>16,25</b>	<b>31632,85</b>	<b>29,42</b>	<b>63974,43</b>	<b>34,43</b>

Source: SP/CNDD

These results are represented in accordance with the graph below.



**Figure 6: Evolution of the overall GHG reduction potential compared to the BAU**

Source: SP/CNDD

Table 2 shows that Burkina Faso is committed to reducing by 16.25% in 2025 and by 2030, by 29.42%. The country is thus part of an increase in its ambitions compared to that of the first NDC which was 18.2% by 2030. Still in relation to the reduction ambitions, Burkina Faso is committed to reducing GHG emissions by 34.43% by 2050.

### 3.1.1. AFOLU sector's contribution to the reduction of GHG emissions

The potential for GHG emission reductions in this sector is presented in Table 3.

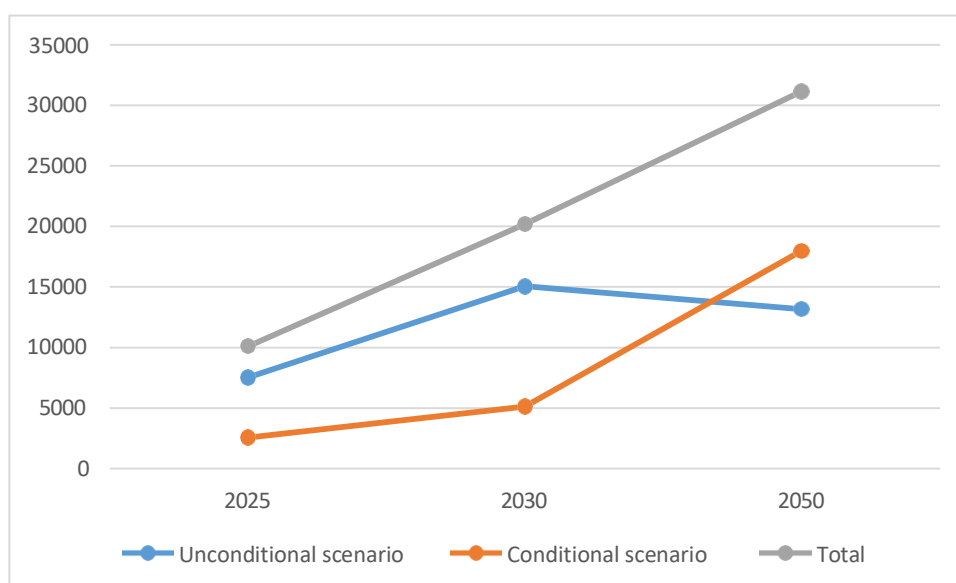
**Table 3: AFOLU Sector's Contribution to GHG Emission Reductions**

Scenario (Gg CO <sub>2</sub> eq)	2025	2030	2050
Unconditional scenario	7527,3	15054,6	13166,8
Conditional scenario	2569,5	5139	17986,4
<b>Total</b>	<b>10096,8</b>	<b>20193,6</b>	<b>31153,2</b>

Source: SP/CNDD

The estimate of the reduction potential of the AFOLU sector gives 10,096.8 Gg CO<sub>2</sub>eq, of which 7,527.3 Gg CO<sub>2</sub>eq for the actions of the unconditional scenario and 2,569.5 Gg CO<sub>2</sub>eq in the conditional scenario by 2025.

The implementation of the mitigation actions of the unconditional scenario of the AFOLU sector will allow a reduction of 8.13% by 2025 compared to the trend scenario and the actions of the conditional scenario a reduction of 2.77% in total national GHG emissions in 2025. The two scenarios put together will contribute to a substantial reduction of 10.91% in national GHG emissions by the same time frame (2025). If we look ahead to 2050, the implementation of the projects will lead to a reduction of 16.76% in overall GHG emissions for both scenarios.



**Figure 7: Evolution of the sequestration potential of the AFOLU sector for the years 2025, 2030, 2050**

Source: SP/CNDD

The AFOLU sector is the largest sector in terms of GHG sequestration potential in Burkina Faso. Reforestation and natural resource preservation actions are therefore those that can increase the country's ambitions.

### 3.1.2. Contribution of the Energy Sector to the Reduction of GHG Emissions

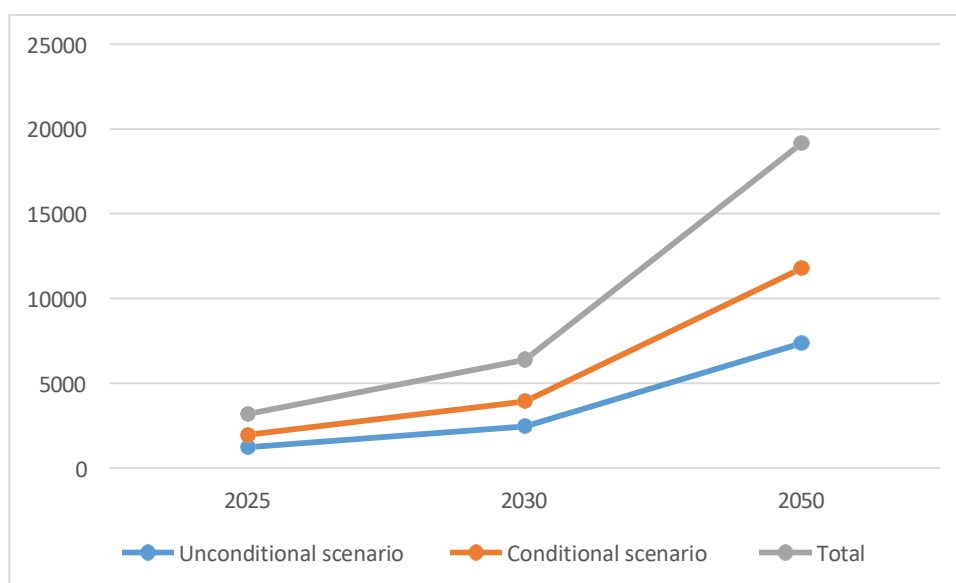
The results in terms of sequestration of GHG emissions in the energy sector are presented in Table 4.

**Table 4: Contribution of the Energy Sector to the Reduction of GHG Emissions**

Scenario (Gg CO <sub>2</sub> eq)	2025	2030	2050
Unconditional scenario	1228,66	2457,34	7371,98
Conditional scenario	1964,05	3928,11	11784,31
<b>Total</b>	<b>3192,71</b>	<b>6385,45</b>	<b>19156,29</b>

*Source: SP/CNDD*

The reduction potential of the energy sector is estimated at 3,192.712 Gg CO<sub>2</sub>eq by 2025 for a potential of 1,228.661 Gg CO<sub>2</sub>eq of the actions of the unconditional scenario and 1,964.051 Gg CO<sub>2</sub>eq of the actions of the conditional scenario. Figure 8 shows the evolution of the different scenarios in the energy sector.



**Figure 8: Evolution of the sequestration potential of the Energy sector for the years 2025, 2030, 2050**

*Source: SP/CNDD*

### 3.1.3. Contribution of the Transportation Sector to the Reduction of GHG Emissions

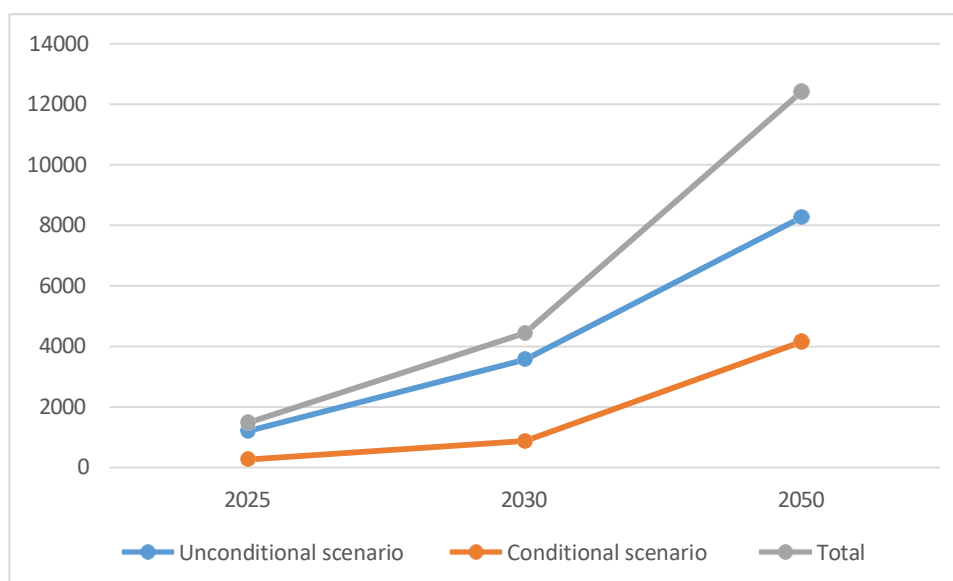
For the transportation sector, the potential for GHG emissions sequestration is presented below in Table 5.

**Table 5: Contribution of the Transport Sector to the reduction of GHG emissions**

Scenario (Gg CO <sub>2</sub> eq)	2025	2030	2050
Unconditional scenario	1210	3563	8265
Conditional scenario	267	876	4153
<b>Total</b>	<b>1477</b>	<b>4439</b>	<b>12418</b>

Source: SP/CNDD

In the transport sector, unconditional actions and actions whose implementation requires a search for (conditional) funding, have GHG emission reduction potentials estimated at 1,210 Gg CO<sub>2</sub>eq and 267Gg CO<sub>2</sub>eq respectively in 2025. The total CO<sub>2</sub> sequestration potential in the sector is 1,477 Gg CO<sub>2</sub>eq in 2025. The evolution of the different scenarios is shown in the figure below.



**Figure 9: Evolution of the GHG sequestration potential of the transport sector for the years 2025, 2030 and 2050**

Source: SP/CNDD

### 3.1.4. Contribution of the Waste sector to the reduction of GHG emissions

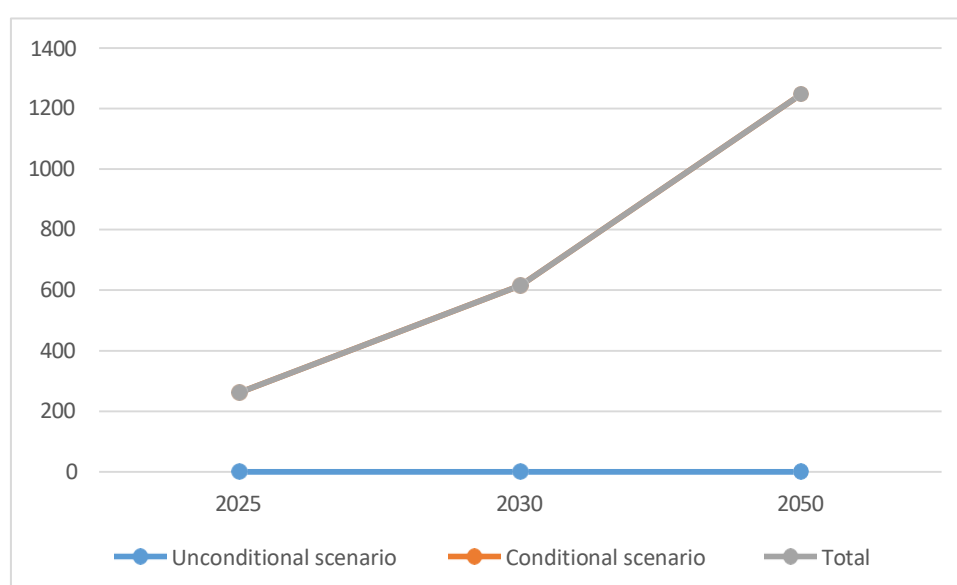
The waste sector contributes to the reduction of GHG emissions through certain actions. Table 6 presents the quantities of GHGs sequestered in the unconditional and conditional scenarios.

**Table 6: Contribution of the Waste Sector to the reduction of GHG emissions**

Scenario (Gg CO <sub>2</sub> eq)	2025	2030	2050
Unconditional scenario	0,00	0,00	0,00
Conditional scenario	262,00	614,80	1246,95
<b>Total</b>	262,00	614,80	1246,95

Source: SP/CNDD

The potential for GHGs that can be sequestered is estimated at 262 Gg CO<sub>2</sub>eq in 2025; 614.80 Gg CO<sub>2</sub>eq in 2030 and 1,246.9 Gg CO<sub>2</sub>eq in 2050. The results are illustrated in Figure 10 below.



**Figure 10: Evolution of the GHG sequestration potential of the waste sector for the years 2025, 2030, 2050**

Source: SP/CNDD

### **3.2. Contribution to GHG emission reductions in the NDC through actions to adapt to the effects of climate change**

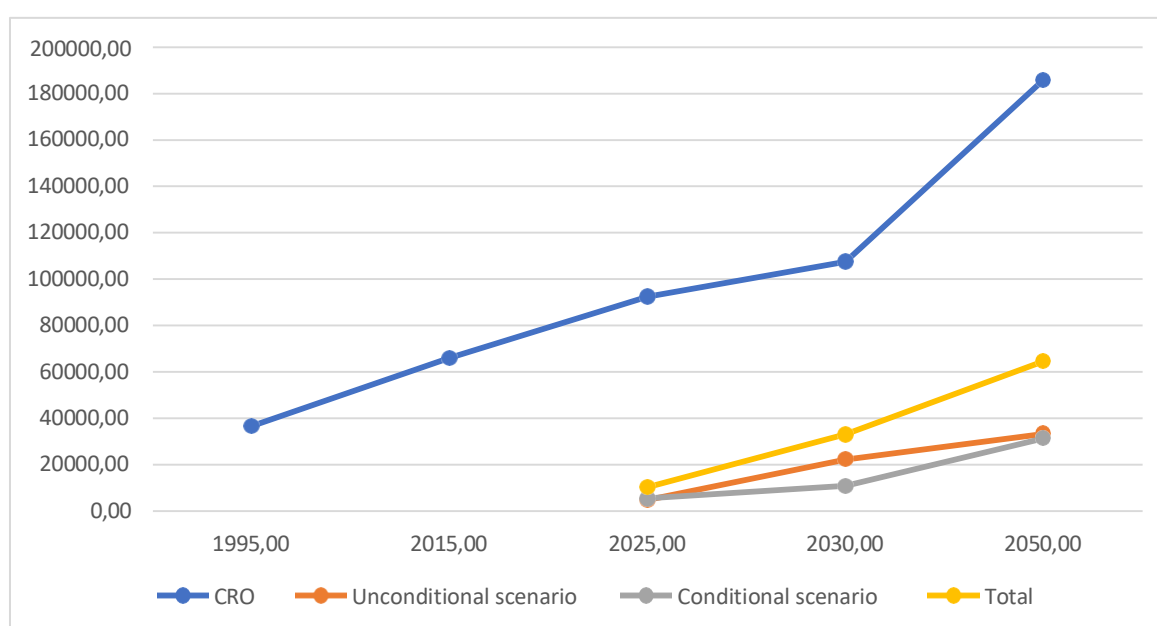
Burkina Faso, aware of its vulnerability to climate change, has developed a culture of resilience in several sectors of activity. These actions, while strengthening the climate resilience of populations, also contribute to the reduction of GHG emissions. The contribution of the selected adaptation actions to the potential for reducing GHG emissions, both conditional and unconditional, is presented in the table below.

**Table 7: Summary of the GHG reduction potential (Gg CO<sub>2</sub>eq) of adaptation actions compared to the BAU scenario**

Scenarios	GHG reduction compared to BAU					
	2025		2030		2050	
	Gg CO <sub>2</sub> eq	%	Gg CO <sub>2</sub> eq	%	Gg CO <sub>2</sub> eq	%
Unconditional scenario	4802,69	5,19	22230,08	20,67	33310,44	17,93
Conditional scenario	5525,80	5,97	10842,62	10,08	31337,96	16,87
<b>Total</b>	<b>10328,49</b>	<b>11,16</b>	<b>33072,70</b>	<b>30,76</b>	<b>64648,40</b>	<b>34,79</b>

Source: SP/CNDD

The results in the table are represented in accordance with the graph below.



**Figure 11: Evolution of the overall GHG reduction potential compared to BAU**

Source: SP/CNDD

The emission reduction potential of adaptation actions by 2030 is estimated at 33,072.70 Gg CO<sub>2</sub>eq, i.e. a 30.76% reduction, including 22230.08 Gg CO<sub>2</sub>eq for the actions of the unconditional scenario and 10,842.62 Gg CO<sub>2</sub>eq for the actions of the conditional scenario.

#### IV. SECTORAL STRATEGIES AND PRIORITY MEASURES

The priority strategies and measures for the implementation of Burkina Faso's NDC are based on the results of analyses of the costs and benefits, the socio-economic benefits of the sectors with potential GHG reductions and the sectors supporting adaptation.

#### **4.1. Cost-benefit analyses**

The cost-benefit analyses concerned projects and programmes in the energy, transport and AFOLU sectors. Analysis in the energy and transport sectors highlighted the economic gains in the short, medium and long term.

For the energy sector, the mitigation actions financed make it possible to save nearly US\$ 22 million in the short term (2025). Including the actions of the unconditional scenario, this saving exceeds US\$ 250 million, or 24% of the investment expenditure (including management costs) that would be mobilized for the implementation of all the actions. In the medium term (2030), both scenarios indicate a much higher saving than that obtained in the short term, i.e. about US\$ 760 million. In the long term (2050), the savings obtained cover almost entirely 98% of all the expenditure necessary for the implementation and maintenance of all the actions adopted in the said sector.

For the transportation sector, monetizing the benefits of implementing GHG emission reduction actions requires assigning a price per tonne of GHG avoided. However, Burkina Faso does not yet have its own benchmark for setting the price per tonne of CO<sub>2</sub>. In the absence of a national standard, the country's analyses are based on the US\$10 price used by the National Biodigester Program (PNB-BF 2020) and Gold standard 2020.

Projects in the forestry, agriculture and livestock sectors that have been implemented at the regional level have highlighted the socio-economic benefits of their implementation in the NDC.

The table below summarizes the costs of implementing the NDC actions.



**Table 8: Summary of NDC Implementation Costs**

Options	Sectors	Cost of implementing actions		
		Scenario unconditional	Scenario conditional	Total
Attenuation	AFOLU	15 468 000	21 500 000	36 968 000
	Energy	430 740 149	577 198 594	1 007 938 743
	Transport	2 910 317	120 743 529	123 653 846
	Rubbish	-	166 228 399	166 228 399
<b>Subtotal attenuation</b>		<b>449 118 465</b>	<b>885 670 522</b>	<b>1 334 788 987</b>
Adaptation	Environment	230 365 419	574 047 048	804 412 467
	Agriculture	735 477 480	366 705 424	1 102 182 904
	Animal resources	65 159 352	137 025 589	202 184 941
	Infrastructure	65 546 760	-	65 546 760
	Habitat	24 000 000	286 618 052	310 618 052
	Transport	264 000	-	264 000
	Water and sanitation	26 437 000	276 416 751	302 853 751
<b>Subtotal adaptation</b>		<b>1 147 250 011</b>	<b>1 640 812 864</b>	<b>2 788 062 875</b>
<b>Total 1</b>		<b>1 596 368 476</b>	<b>2 526 483 386</b>	<b>4 122 851 862</b>
<b>Gender</b>		-	1 379 891	1 379 891
<b>Total 2</b>			<b>1 379 891</b>	<b>1 379 891</b>
<b>Cost of the NDC</b>		<b>1 596 368 476</b>	<b>2 527 863 277</b>	<b>4 124 231 753</b>

Source: SP/CNDD

#### 4.2. Socio-economic advantages and benefits

The socio-economic benefits and advantages of Burkina Faso's NDC actions include, among others, improved water security (in particular better quality and quantity of water for the population), improved food security (including through diversified crops, better retention of organic carbon and water in the soil, etc.). improved productivity and resilience), disaster risk reduction, and more natural jobs and livelihoods. The comprehensiveness of the socio-economic benefits in the implementation of the different sectors of the NDC is annexed to the document (Annex 4).

### 4.3. Areas of Adaptation Support

Several actions have been identified in the so-called support sectors (health, research, gender, infrastructure). These actions, although not directly contributing to the reduction of GHG emissions, play a major role in the socio-economic development of populations and improve their resilience.

The major actions undertaken by the government in terms of health system reforms, investments to improve the medical technical platform, capacity building of healthcare staff and construction of health infrastructure, are all efforts made but cannot be evaluated in terms of carbon sequestration potential.

For the infrastructure sector, although it contributes to the improvement of the living conditions of the population, it has not been evaluated to highlight its potential to reduce greenhouse gas emissions under the NDC.

For the consideration of gender and social inclusion, the NDC is part of this dynamic which will certainly promote the achievement of the objectives of the country's commitments. Social inclusion and gender mainstreaming must guide the implementation of the actions contained in the NDC and thus promote GHG reduction.

Finally, research, as a sector that contributes enormously to scientific and technological innovation, contributes to finding solutions for resilience to the effects of climate change. Under the NDC, the mitigation potential of the sector's actions has not been assessed.

## **V. FRAME FROM REPORTING                      TRANSPARENCY AND FOLLOW-UP                      Of the PROGRESS**

Under the supervision of the SP/CNDD, the monitoring and evaluation of the NDC will be carried out by a coordination unit in conjunction with sectoral actors.

To this end, a capacity-building plan for the sectors concerned by the "Measurement, Reporting and Verification (MRV)" will be established in the NDC implementation strategy with the corresponding costs.

### 5.1. NDC Implementation Monitoring Indicators

Implementation monitoring indicators have been formulated for the actions selected in the different sectors of the NDC (Housing, Environment, Agriculture, Infrastructure, Water)

and sanitation, Transport, Energy and Livestock). The inventory of these indicators can be found in Appendix 5 of the document.

## **5.2. Institutional arrangements for the implementation of the NDC**

The Ministry of Environment, Green Economy and Climate Change (MEEVCC) will provide leadership through the establishment of a Coordination Unit that will work closely with designated focal points at the level of other ministerial departments. These are: (i) the Ministry of Agriculture; (ii) Ministry in charge of water; (iii) Ministry in charge of animal resources; (iv) Ministry in charge of housing and urban planning; (v) Ministry in charge of infrastructure; (vi) Ministry of Health; (vii) Ministry of Energy and (viii) Ministry of Transport;

In addition, the Coordination Unit will work in synergy with local authorities, NGOs, the private sector and with ministries with a cross-cutting vocation, in particular the Ministry in charge of Scientific Research and Innovation, the Ministry in charge of Women and Gender, the Ministry in charge of Foreign Affairs and the Ministry in charge of Finance for the needs of financing agreements. Thus, it will have to have a manual of administrative procedures and a harmonized system for monitoring and evaluating projects, detailing the main responsibilities and the objectives assigned.

The support of technical and financial partners remains fundamental for the effective implementation of conditional projects and programmes.

## **5.3. Monitoring and evaluation system**

### **5.3.1. Tracking device**

The monitoring of the indicators will be carried out by the SP/CNDD in collaboration with the NDC focal points, identified within the Directorates General for Sectoral Studies and Statistics (DGESS) of the ministerial departments.

Operationally, the selected indicators will be provided with the assistance of the focal points and capitalised on by a Coordination Unit set up for this purpose. The Coordination Unit is chaired and led by the SP/CNDD. Collaborative protocols for data sharing will be developed and signed by sectoral actors to facilitate data collection.

The Coordination Unit should include at least three technical bodies, including:

- **an adaptation technical body** that will capitalize on data from the NDC's adaptation project management units;
- **a technical " mitigation" body** that will capitalize on data from the NDC mitigation project management units;
- **a support body** that will be responsible for the development of the partnership for the implementation and monitoring of projects.

The sectoral ministerial departments will work to capitalize on the information collected by local authorities, NGOs and CSOs according to their field of intervention.

### **5.3.2. Evaluation system**

According to the provisions of the Paris Climate Agreement, the NDC is revised on a five-year cycle. Therefore, it will be subject to an evaluation when it is revised. However, it could be the subject of an interim evaluation.

### **5.3.3. Framework for monitoring progress**

Monitoring of progress on NDC mitigation and adaptation actions focuses on the implementation of an MRV system in agriculture, forestry, other forms of land use, waste, energy and industrial processes.

The Ministry in charge of the environment will coordinate an ad hoc committee made up of all the competent structures for the implementation of an effective MRV system. Among other things, it will be a question of monitoring: (i) the increase of renewable energies in the electricity production mix of the national grid; (ii) improving energy and resource efficiency in the various sectors; (iii) the progression of vegetation cover; (iv) promoting clean, efficient and sustainable energy technologies to reduce over-reliance on fossil fuels and unsustainable biomass; (v) the adoption of efficient and low-carbon emission transport systems; the adoption of climate-smart agriculture and effective livestock management; and (vi) advancing sustainable waste management systems.

The data will be collected taking into account, as best as possible, the gender dimension through disaggregation by sex and age.

## **VI. IMPLEMENTATION MECHANISMS**

To fully implement the actions of the NDC, Burkina Faso will need grants and other multilateral and bilateral conventional financing, technical and operational capacity building support, as well as technology transfer.

Technical and financial partners will be solicited to support the implementation of the NDC investment plan and the communication strategy. In a challenging economic context aggravated by the COVID-19 pandemic, Burkina Faso will adopt a comprehensive, holistic, and multisectoral approach to low-carbon, climate-resilient, and gender-responsive development.

### **6.1. Financial requirements**

The assessment of the financing needs of climate change mitigation and adaptation actions under this NDC is based on the programmes and projects identified in the key sectors.

To achieve the target of 29.42%, an amount of US\$449,118,465.3 is planned under the unconditional scenario against US\$885,670,522 expected for the conditional scenario, i.e. a total amount of US\$1,334,788,987.

Also, the country has taken the option of strengthening its adaptation and resilience through the implementation of actions whose GHG emission reduction potential is estimated at 33,072.72 Gg CO<sub>2</sub>eq, or 30.76% compared to the Business As Usual scenario. This potential is divided into unconditional scenario (20.67%) and conditional scenario (10.08%). The implementation of the actions of the unconditional scenario amounts to US\$ 1,147,250,011 compared to \$US 1,640,812,864 for the conditional scenario, for a total amount of US\$ 2,788,062,875.

The financing requirements for GHG emission reductions (mitigation and adaptation) amount to US\$4,122,851,862. In relation to gender, which is cross-cutting, the specific funding needs for GHG reduction initiatives amount to 1,379,891

\$US. In sum, the financial requirements of the NDC amount to US\$4,124,231,753.

## 6.2. Capacity building and technology transfer

Capacity building aims to equip the various actors involved in the implementation of the NDC in the area of the MRV system, resource mobilization mechanisms and the content of the NDC in general.

The strategy will focus on:

- information, awareness-raising, education and training actions to understand the issue of climate change, provide responses in terms of adaptation and mitigation or obtain means of implementation (climate finance, clean and/or adaptive technologies, etc.);
- analyses or studies to determine the potential for actions and implementation needs to develop mitigation and/or adaptation measures;
- support for the development and submission of documents required by the transparency framework at the international level. These documents are, among others, GHG inventories, National Communications, Biennial Update Reports, Technology Needs Assessment Reports, Long-term Low-Carbon Strategies, National Adaptation Plans;
- support for the development of public policies on mitigation and adaptation and for the development of legislative and/or regulatory texts as part of domestic implementation measures;
- support for participation in international climate negotiations;
- promotion of the development and transfer of environmentally sound technologies (low- or non-carbon and/or resilience-supporting) to enable Burkina Faso to contribute to the global response to climate change.

## 6.3. Strategy for mobilizing resources for the implementation of the NDC

Resource mobilization is very crucial for the effective and efficient implementation of the priority projects selected under the NDC.

Sources of funding for the implementation of the NDC will be sought at both the national and international levels. The following sources of funding will be explored:

- **State resources** : the financing of the NDC should primarily come from the State budget where a budget line should be created. The

development in their elaboration must provide a substantial budget to integrate NDC actions. Local authorities (Municipalities and Regions) could also contribute to the implementation of the NDC by ensuring not only the integration of their actions into the planning of Communal Development Plans (CDPs) and Regional Development Plans (RDPs), but also by providing resources for their implementation.

- **Bilateral partners:** Funding from bilateral cooperation can be mobilized to support the implementation of the NDC. The excellent relations between Burkina Faso and countries that make climate finance their priority can be leveraged for the implementation of NDC actions.
- **Multilateral partners :** Multilateral institutions and multilateral funds established under and outside the United Nations Framework Convention on Climate Change (UNFCCC) can be mobilized to support financing for the implementation of the NDC.
- **the private sector and Non-Governmental Organizations :** the private sector will be involved in mobilizing resources for the NDC, particularly through the Public-Private Partnership (PPP). This partnership has enabled the implementation of certain projects in the renewable energy sector. Non-Governmental Organizations (NGOs) are also key partners in the fight against climate change and are therefore a source of mobilization of financial or technological resources for the implementation of the NDC.

#### **6.4. Communication strategy**

A communication strategy on the NDC will be developed and implemented, with a view to strengthening its visibility and ownership by all actors at both national and local levels. It will give a primary place to mass communication, in particular through the use of national languages and the choice of appropriate Information and Communication Technologies (ICTs).

In addition, for a greater mobilization of funding to support the implementation of the NDC, the Burkinabe State will initiate communications, governmental and parliamentary seminars and round tables on its NDC with the various stakeholders and present the

opportunities it offers in relation to the fight against climate change, sustainable development and the reduction of gender inequalities and social inclusion.

Similarly, for good coverage of the actions and initiatives of the NDC, it would be necessary to train and involve the media.

## **VII. RISK ANALYSIS AND MITIGATION MEASURES**

Burkina Faso's new commitment to contribute to the achievement of the Paris Agreement objective comes at a particular time that could jeopardize its reduction ambitions. Indeed, the context of insecurity experienced in some localities in Burkina Faso since the beginning of 2016 could increase the country's vulnerability and negatively impact the implementation of the actions planned in the revised NDC. Depending on the actions involved, participatory approaches with stakeholders will identify alternative options adapted to the circumstances.

In addition, the COVID-19 pandemic that is affecting the whole world is hindering investment by technical and financial partners and the private sector in all priority actions for the implementation of the NDC. This situation could impact the investment opportunities available to support the conditional objective of the NDC. The promotion of domestic resource mobilization for the implementation of the NDC's actions will be prioritized.

Finally, political or institutional instability could affect the achievement of the NDC's objectives. Awareness-raising actions will be carried out with regard to the new authorities.



## **ANNEXES**

## Appendix 1: List of Mitigation Actions

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO <sub>2</sub> eq)		
				2025	2030	2050
AFOLU	Unconditional	Project to support populations dependent on the forest PAPF/DGM	4 500 000	3200,50	6401,00	12802,00
		Cashew nut development support project in the Comoé basin for REDD+ (PADA/REDD+)	10 968 000	4326,80	8653,60	364,80
	Conditional	Forests, agroforestry and the establishment of nutritious gardens for climate-smart diversification	5 700 000	1757,30	3514,50	12300,80
		Realization of 100000 hectares of Assisted Natural Regeneration in 25 municipalities of Burkina Faso	15 800 000	812,20	1624,50	5685,60
Energy	Unconditional	Acquisition and installation of 15,000 light-emitting diode (LED) street lamps to replace high-pressure sodium and mercury street lamps for public lighting	10 100 000	50,21	100,43	301,29
		Construction of solar power plants in Koudougou (20 MWp) and Kaya (10 MWp) with a capacity of 30 MWp, including reinforcement of the 220 km grid (Yeelen)	73 952 490	231,79	463,58	1390,74
		Construction of the 15 MWp solar photovoltaic power plant in Essakane	30 000 000	115,89	231,79	695,37
		Construction of the 14 MWp photovoltaic solar power plant in Matourkou with 6 MWh of storage (KFW)	28 864 000	108,17	216,34	649,01
		Zagtouli Solar Photovoltaic Power Plant Extension Project (17MWp)	46 000 000	131,35	262,69	788,08

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO2eq)		
				2025	2030	2050
		Project for the acquisition and installation of solar equipment in public buildings.	9 999 941	15,20	30,41	91,22
		Construction of the photovoltaic solar power plant in Dori (Yeelen) with a capacity of 6.29 MWp (Yeelen).	21 306 000	48,60	97,20	291,59
		Construction of the photovoltaic solar power plant in Diapaga with a capacity of 2.2 MWp (Yeelen).	7 452 000	17,00	34,00	101,99
		Construction of the photovoltaic solar power plant in Gaoua with a capacity of 1.13 MWp (Yeelen).	3 828 000	8,73	17,46	52,38
		Solar energy project for off-grid CSPS.	670 000	1,08	2,16	6,48
		Project for the electrification of socio-community infrastructure in 300 rural localities by solar system.	14 292 231	18,09	36,19	108,56
		Project for the acquisition and installation of efficient air conditioners to replace mono blocks in public buildings.	370 000	0,40	0,80	2,41
		Solar backup project.	6 709 086	9,82	19,64	58,91
		Project for the construction of a mini-photovoltaic solar power plant with storage in medical centers with surgical antenna (CMA).	7 226 448	9,97	19,93	59,80
		Acquisition and installation of 10,500 light-emitting diode (LED) street lamps to replace high-pressure sodium and mercury street lamps for public lighting.	7 548 952	35,15	70,30	210,90

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO2eq)		
				2025	2030	2050
		Acquisition and installation of 3,000 light-emitting diode (LED) street lamps to replace high-pressure sodium and mercury street lamps for public lighting in the streets of Ouagadougou (PASEL).	1 960 000	10,04	20,09	60,26
		Acquisition and installation of 1,500 light-emitting diode (LED) street lamps to replace high-pressure sodium and mercury street lamps for public lighting in the streets of Bobo Dioulasso (PASEL).	1 160 000	5,02	10,04	30,13
		Acquisition and installation of 1,500,000 light-emitting diode (LED) lamps to replace fluorescent tube lamps in households.	13 651 000	79,91	159,82	479,47
		Construction of the photovoltaic solar power plant in Ouagadougou with a capacity of 43 MWp (Ouaga North West) (Yeelen).	145 650 000	332,23	664,46	1993,39
	Conditional	Project for the construction of a solar power plant in Dédougou (18 MWp).	36 000 000	139,07	278,15	834,44
		Project for the construction of 3 regional photovoltaic solar power plants with a combined capacity of 300 MWp, including 150 MWp in a first phase (Kaya 1 and Koupéla 2).	300 000 000	1158,95	2317,90	6953,69
		Project to deploy fifty thousand (50,000) Solar Home System 2 (SHS2) solar kits (60 Wp) for the benefit of households in Burkina Faso.	31 199	2,32	4,64	13,91
		Project to build a 10 MW biomass-waste thermal power plant in Ouagadougou.	30 000 000	14,70	29,40	88,20

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO2eq)		
				2025	2030	2050
		Project to build a solar power plant in Pâ (30 MWp).	60 000 000	231,79	463,58	1390,74
		Project for the construction of a solar power plant in Kalzi (30 MWp).	72 000 000	231,79	463,58	1390,74
		Build a solar power plant in Zano (24 MWp).	48 000 000	185,43	370,86	1112,59
Transport	Unconditional	Support Project for the Modernization of the Transport Sector (PAMOSSET-FC) component "Establishment of a sustainable renewal system for the fleet".	140 000	486,00	1727,00	1727,00
		Greater Ouagadougou Urban Mobility Project.	103 845	701,00	1695,00	5790,00
		Project for the construction of the Accra-Ouagadougou rail interconnection.	2 666 472	23,00	141,00	748,00
	Conditional	Rehabilitation project of the Côte d'Ivoire-Ouaga-Kaya border railway line.	268 508	25,00	230,00	1834,00
		Bobo-Dioulasso urban transport project.	120 000 000	231,00	559,00	1911,00
		Project for the construction of the Kaya-Niger border railway.	402 460	7,00	59,00	223,00
		Project to set up a heavy urban and suburban rail service to the city of Ouagadougou from the existing line.	72 561	4,00	28,00	185,00
Rubbish	Conditional	Methane recovery project from the wastewater treatment of the Kossodo WWTP.	72 784 000			
		CTVD landfill methane recovery project.	8 444 000			
		Project to recover 200,000 m3 of faecal sludge into biogas.	15 000 000			

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO2eq)		
				2025	2030	2050
		Project for the construction and extension of wastewater treatment plants.	36 956 921			
		Project for the construction and extension of faecal sludge treatment plants.	33 043 478			

## Annex 2: List of integrated adaptation actions

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO <sub>2</sub> eq)		
				2025	2030	2050
Environment		Integration of climate change adaptation measures into the concerted management of the W-Arly-Pendjari transboundary complex (ADAPT WAP).	2 590 350			
		Preservation and fight against the degradation of the sacred hill of Boulgou and its periphery.	50 000			
		Project to support the restoration of ecosystems in the Lergo bush terroir through the fencing of the commune of Garango.	55 877			
		Improving sustainable rural livelihoods" in the Boucle du Mouhoun and Centre-Ouest regions of Burkina Faso.	5 481 000			
		Communal Landscape Management for REDD+ Project	100 000 000	3500	19500	25000
		Beog Puuto	24 928 000			
		Weoog Paani	19 680 000			
		EU/Wakanda project to provide multisectoral support to 20 villages.	6 500 000			
		OSRO/BKF/801/SWE.	23 400 000			
		Support for the creation of a national MRV system in Burkina Faso.	2 080 000			
		Climate Resilience in the Nakambé Basin (RECLIM) project	225 000			
		Project to promote index-based climate insurance for smallholder farmers in Burkina Faso.	29 462 792			
		Non-Timber Forest Products, Phase 3.	10 000 000			
		Support for the Sustainable Management of Forest Resources (AGREF)/BKF/023.	5 912 400			
	Conditional					

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO2eq)		
				2025	2030	2050
		Ecosystem restoration for the climate change resilience of local communities in the Great Green Wall intervention area in Burkina Faso.	85 000 000	576,9	1153,9	3000
		Sustainable land management and strengthening the resilience of communities in the Toessin Dam watershed.	56 697 248	6,7	13,4	32
		Integrated soil management for agricultural productivity and environmental restoration.	39 649 800	282,8	565,5	1413,8
		Implementation of an AFOLU Emission Reduction Program (REDD+ + Agriculture).	300 000 000			
		Pilot ecovillages initiative in Burkina Faso.	70 000 000			
		Sustainable management of conservation areas in the Centre-West, Boucle du Mouhoun, Cascades, South-West and North regions.	22 700 000	4014,19	8028,39	24085,17
Agriculture	Unconditional	Project improvement from the productivity agricultural by water and soil conservation (PACES).	16 779 380	118,5	236,9	710,7
		Regional Support Project for the Sahel Irrigation Initiative - Burkina Faso (PARIIS-BF).	40 109 850			
		Burkina Faso-China Agricultural Cooperation Programme (PCA/BF-CH).	58 725 320			
		Localized Irrigation and Agricultural Resilience Project in Burkina Faso (PIRA-BF).	3 055 000			
		Project for the development and enhancement of the Leraba plain (PAVAL).	63 899 580			
		Project for the conduct of agricultural development actions in the Soum area (PDA-Soum).	61 800 000	12,8	25,7	64,2



Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Project for the participatory management of natural resources for rural development in the North, Centre-North and East (NEER TAMBA).	122 829 550	353,7	707,5	2334,7
		Project improvement and from the Securing (SECURAGRI).	4 800 000	131,2	262,4	656
		Project to Support Agricultural Sectors in the South-West, Hauts-Bassins, Cascades and Boucle du Mouhoun Regions (PAFA-4R).	98 793 600	83	165,6	414,1
		Dangoumana Agricultural Development Project (PDAD).	19 453 200	40,1	80,2	200,5
		Burkina Faso Agricultural Resilience and Competitiveness Project (PReCA).	245 232 000	122,3	244,6	611,7
	Conditional	Project for the development of 35,000 ha of lowlands and irrigated perimeters and their development by the intensive rice cultivation system (SRI).	160 000 000			
		Integrated Development Programme for the Samendeni Valley Phase II (PDIS II): development of irrigated perimeters and recalibration of the Mouhoun.	119 182 000			
		Integrated soil management for agricultural productivity and environmental restoration.	43 218 280			
		Support for the sustainable management of agricultural land in five regions of Burkina Faso (PGDTA-5R).	44 305 144	437,4	874,7	2186,8
	Unconditional	Recovery and enhancement of pastoral areas ("ReVaP").	13 989 540	104,7	209,41	628,23
Animal resources		Programme for the Development of Sustainable Pastoralism in the Sahel (PDPDS).	210 320	282,645	565,29	1695,87

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO2eq)			
				2025	2030	2050	
		Livestock Mobility Support Project for Better Access to Resources and Markets (PAMOBARMA) in West Africa.	959 492	9,12	18,24	54,72	
		Resilience of pastoralists to crises (food and security) and climate change.	50 000 000	7,62	15,24	45,72	
	Conditional	Rehabilitation of 225000ha of degraded land for agro-sylvo-pastoral purposes.	71 000 000				
		Creation and sustainable management of 02 livestock production intensification zones (ZIPA) in 2 regions of the country.	47 600 000				
		Mowing and conservation of 10000T of roughage per year (hay and crop residues).	17 830 189				
		Development of water points in order to preserve the banks of the Kou valley.	595 400	0,8	1,61	4,83	
	Water and sanitation	Unconditional	Integrated Programme for Development and Adaptation to Climate Change in the Niger Basin (PIDACC/BN).	16 037 000			
			Hygiene and sanitation project in the North, Centre-North and Centre-South Regions at the BF 2018-2022.	10 400 000			
Conditional		construction of a hydro-agricultural and electric dam in BASSIERI in Burkina Faso.	115 000 000	52,5	105	315	
		Restoration, protection and enhancement of Lake Dem.	102 000 000				
		Construction of a hydro-agricultural and hydroelectric dam in Banwaly.	59 416 751	50,06	100,12	300,36	
Infrastructure	Unconditional	Project from road repairs Maintenanceperiodical from the RN06 : Ouagadougou-Pont Nazinon.	11 585 368				
		Project for the construction of the Poa crossing structure on the Kyon-Poa track.	1 060 168				
		Project for the construction of a crossing structure in Kayao.	164 886				

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO2eq)		
				2025	2030	2050
		Periodic maintenance work project for dirt roads for the year 2019: Lot 03: Construction work on crossing structures on the Zecco-Toungou track and in the commune of Pô.	129 844			
		Project for the construction of structures and development of the RD55 bypass: Embr. Rn04-absouya.	2 717 770			
		Project for the emergency rehabilitation and asphaltting programme of road sections and crossing structures / lot 6: work on the Gutti dam (Ramsa-Séguenega).	9 401 166			
		Project for the development and asphaltting of urban roads in Koudougou (7 km + 2 crossing structures).	6 470 432			
		Project for the construction of about 2.5 km of gutters for the drainage of rainwater in Koudougou.	1 243 746			
Habitat	Unconditional	Reinforcement of the rainwater treatment network of the city of Ouagadougou phase III: development of the outlet inside and downstream of the Bangr weogo urban park.	24 000 000			
	Conditional	Cartography some Areas at risk flooding in agglomerations of more than 5000 inhabitants (50 agglomerations).	84 211 000			
		Valorization of local materials and Promotion of a habitat without wood or sheet metal in adaptation to climate change in rural and semi-urban areas of Burkina Faso.	197 657 852			
		Pilot programme to promote efficient cooling in social housing.	666 000	40,527		

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Restoration and development from the belt Green of Ouagadougou.	2 330 000	23,4		
		Energy efficiency in urban and rural housing.	1 753 200	40,527		
Transport	Unconditional	Lomé-Ouagadougou-Niamey Regional Economic Corridor Project (LON).	264 000	37	199	894

**Annex 3: List of potential socio-economic benefits in the implementation of actions under the different sectors of the NDC**

SECTOR	SOCIO-ECONOMIC BENEFITS
<b>Transport/Infrastructure</b>	the creation of temporary and permanent jobs;
	the decrease in the number of road accidents;
	saving time from travel to economic activities or leisure;
	the reduction in the number of flood victims;
	the improvement of the living environment of the population;
	the long-term reduction in the cost of goods through the reduction in the cost of goods transport;
	the long-term reduction of GHG emissions in the transportation sector, resulting in a improved health of populations (reduced pollution-related diseases);
<b>Rubbish</b>	increasing energy supply;
	the improvement of the living conditions of the population;
	the achievement of savings on the import of electricity or fuel;
	the use of composting fertilizers for faecal sludge;
	the sustainable management of agricultural fertilisers;
	the use of compost;
	methane recovery for a considerable reduction in greenhouse gas emissions;
<b>Agriculture</b>	the establishment of mechanisms for access to quality agricultural inputs, financing and advisory support;
	increasing agricultural productivity, production and incomes on a sustainable for farmers, including women and youth;
	the creation of green jobs;
	increased incomes for women project beneficiaries;
	increasing the resilience of beneficiary populations to change Climate;
	the reduction of the risks of pollution of water sources and biodiversity by non-use of herbicides due to the low grass cover of drip irrigated sites;
	the development of irrigated perimeters;
	the increase in the areas of land used by the development of lowlands, and the recovery of degraded land;
<b>Forestry</b>	sustainable management of forest resources and contribution of forest value chains to GDP;
	the coverage of energy needs, by extending forest management;
	the restoration of degraded resources and the transfer of skills to local authorities Territorial;
	strengthening the resilience of ecosystems and improving people's livelihoods in relation to the issue of climate change through the establishment of a multi-hazard early warning system and the implementation of concrete adaptation measures;
	sustainable land management and improving the resilience of agro-sylvo-pastoral to climate change;
	improving the resilience of Niger River ecosystems and populations through a sustainable management of natural resources;

SECTOR	SOCIO-ECONOMIC BENEFITS
	contributing to the sustainable management of conservation areas;
	contributing to the achievement of food security and the preservation of ecosystems Natural;
	sustainable restoration of vegetation cover to strengthen the resilience of populations and contribution to carbon sequestration;
	support for the development of local forest and environmental governance initiatives by increasing resilience to climate change and preserving forest resources;
Breeding	improving the coverage of livestock feed needs;
	the improvement of the vegetation cover;
	the improvement of the living conditions of agro-pastoralists;
	the increase in grazing areas;
	the increase in functional pastoral areas;
	the increase in the areas recovered;
	job and income creation;
	the reduction of competition for natural resources;
	the fixing and protection of the banks;
	the reduction of wood cutting;
	reducing the risks of land degradation and conflict;
	reducing animal health risks for transit/destination countries;
	securing pastoral activities;

## Annex 5: Directory of NDC Monitoring Indicators and Alignment to OSD Targets

SECTORS	CDN TRACKING INDICATORS	RELEVANT SDG TARGETS
Energy	Number of equipment installed (efficient lamps and efficient air conditioners), Installed powers.	5.a, 5.b, 5.c and 13.b
Infrastructure	Physical/financial execution rate (%); Proportion/linear of developed roads; Proportion/linear of converted gutters.	9.1 ; 9.a; 11.5 ; 13.1 ; 19.b
Agriculture	Number of hectares of degraded land recovered, Number of hectares of irrigated perimeter developed, Number of hectares of lowlands developed, Areas irrigated with efficient irrigation systems exploited, Number of hectares of perimeter with total water control developed.	1.1 ; 1.2 ; 1.4 ; 1.5 ; 2.1; 2.2; 2.3; 2.4 ; 5.1 ; 6.4; 8.2; 8.4; 10.2; 12.2; 13.1; 13.2; 15.3.
Animal Resources	Area of marked area, Area of degraded land recovered, Total area of functional pastoral areas, Length of marked cattle track, Area of secure pastoral areas.	1.a; 1.4 ; 1.5 ; 2.1 ; 2.3 ; 2.4 ; 6.1 ; 9.1.
Water, Sanitation and Waste	Number of faecal sludge collection and treatment centers built; Number of water treatment plants built; Additional amount of CO2 sequestered (tonne); Amount of biogas produced; Quantity of faecal sludge recovered into biogas; Amount of greenhouse gases assessed; Amount of methane recovered; Quantity of waste treated, Quantity of waste recovered; Amount of waste disposed of.	5.5 ; 5.c; 13.2 ; 13.3.
Habitat	Linear km of gutters completed; Number of agglomerations whose risk areas are mapped; Number of new construction technologies developed in the field of construction; Proportion of local materials used.	1.4 ; 4.3 ; 5.b; 5.1; 11.3 ; 4.3 ; 9.1;10.3.
Transport	Rate of realization of daily weather forecasts, Number of user vehicles taken out of circulation, Number of new buses put into circulation, Linear railway line built.	5. b; 5.c; 5.5 ; 13.b; 13.3 ; 11.2 ; 9.1 ; 13.3.
Environment	Reduced amount of greenhouse gases emitted; Area of new agroforestry plantations established, Area of forests under management (for timber production); Number of seedlings planted, Surface area of new agroforestry plantations set up, Number of conservation areas created by local authorities per year, Area on which FMNR is practised, Number of good practices implemented in connection with adaptation.	1.5 ; 11.6 ; 13.1 ; 15.3 ; 15.4.