



**BURKINA FASO**

**BURKINA FASO'S NATIONALLY  
DETERMINED CONTRIBUTION (NDC)  
2021-2025**

**Final version**

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# TABLE OF CONTENTS

LIST OF TABLES .....	IV
LIST OF FIGURES .....	IV
ACRONYMS AND ABBREVIATIONS .....	V
FOREWORD.....	VII
EXECUTIVE SUMMARY .....	VII
I. NATIONAL CONTEXT .....	1
II. METHODOLOGICAL APPROACH .....	5
III. BURKINA FASO'S AMBITIONS FOR REDUCING GHG EMISSIONS .	7
3.1. Overall contribution of CDN mitigation actions .....	7
3.1.1. Contribution of the AFAT sector to reducing GHG emissions .....	8
3.1.2. Energy sector's contribution to reducing GHG emissions .....	10
3.1.3. The transport sector's contribution to reducing greenhouse gas emissions .....	10
3.1.4. The waste sector's contribution to reducing greenhouse gas emissions .....	11
3.2. Contribution to reducing greenhouse gas emissions in the CDN through actions to adapt to the effects of climate change .....	12
IV. SECTORAL STRATEGIES AND PRIORITY MEASURES.....	13
4.1. Cost-benefit analysis.....	14
4.2. Socio-economic benefits.....	15
4.3. Adaptation support sectors .....	16
V. FRAMEWORK FOR TRANSPARENCY, REPORTING AND MONITORING PROGRESS .....	16
5.1. Indicators for monitoring the implementation of the CDN .....	16
5.2. Institutional arrangements for implementing the CDN .....	17
5.3. Monitoring and evaluation system .....	17
5.3.1. Monitoring system .....	17
5.3.2. Evaluation system .....	18
5.3.3. Progress monitoring framework.....	18
VI. IMPLEMENTATION MECHANISMS.....	19
6.1. Financial requirements .....	19
6.2. Capacity building and technology transfer.....	20
6.3. Resource mobilisation strategy for the implementation of the NDC .....	20
6.4. Communication strategy .....	21
VII. RISK ANALYSIS AND MITIGATION MEASURES .....	22
APPENDICES .....	i
Annex 1: List of mitigation actions .....	ii

Annex 2: List of integrated adaptation actions.....	vii
Annex 3: List of potential socio-economic benefits of implementing actions in the various NDC sectors xiii .....	
Annex 5: Inventory of NDC monitoring indicators and alignment with ODD targets...	xv

## LIST OF TABLES

Table 1: GHG emissions in Gg CO <sub>2</sub> eq.....	3
Table 2: Summary of the potential for reducing CO <sub>2</sub> eq GHGs compared with the BAU scenario 8	
Table 3: Contribution of the AFAT sector to reducing GHG emissions 9 .....	
Table 4: Contribution of the Energy sector to reducing GHG emissions .....	10
Table 5: Contribution of the Transport sector to reducing GHG emissions .....	11
Table 6: Contribution of the waste sector to reducing GHG emissions.....	12
Table 7: Summary of the GHG reduction potential (Gg CO <sub>2</sub> eq) of adaptation actions compared with the BAU scenario .....	13
Table 8: Summary of NDC implementation costs .....	15

## LIST OF FIGURES

Figure 1: Migration of isohyets.....	1
Figure 2: Change in national GHG emissions in Gg CO <sub>2</sub> equivalent from 1995 to 2017 2	
Figure 3: Change in national GHG emissions by sector from 1995 to 2017. 3 .....	
Figure 4: Breakdown of GHG emissions by sector in 1995 .....	4
Figure 5: Breakdown of GHG emissions by sector in 2015 .....	4
Figure 6: Evolution of overall GHG reduction potential compared to BAU.....	8
Figure 7: Evolution of the sequestration potential of the AFAT sector for the years 2025, 2030, 2050.....	2
Figure 8: Evolution of sequestration potential in the energy sector for the years 2025, 2030, 2050.....	20
Figure 9: Evolution of the GHG sequestration potential of the transport sector for the years 2025, 2030 and 2050.....	20
Figure 10: Evolution of the GHG sequestration potential of the waste sector for the years 2025, 2030, 2050.....	12
Figure 11: Evolution of overall GHG reduction potential compared to BAU.....	13

## ACRONYMS AND ABBREVIATIONS

<b>AFAT</b>	Agriculture, Forestry and Other Land Use
<b>ANAM</b>	National Meteorological Agency
<b>BAU</b>	: Business As Usual
<b>NTDB</b>	National Topographic Data Base
<b>CAEP</b>	Climate Action Enhancement Package
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>CDN</b>	Contribution Determined at National Level
<b>CET</b>	Technical Landfill Centre
<b>DIC</b>	Integrated Waste Recovery Centre
<b>CN</b>	: National Communication
<b>CO eq<sub>2</sub></b>	Carbon dioxide equivalent (CO equivalent ) <sub>2</sub>
<b>CPDN</b>	Expected Contribution Determined at National Level
<b>DGESS</b>	General Directorates for Studies and Sectoral Statistics
<b>EX-ACT</b>	: EX-Ante Carbon-balance Tool
<b>FAARF</b>	Fonds d'Appui aux Activités Rémunératrices des Femmes (support fund for women's income-generating activities)
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FIE</b>	Fonds d'Intervention pour l'Environnement (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>IDH</b>	Human Development Index
<b>IGB</b>	Institut Géographique du Burkina
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>MEEVCC</b>	: Ministry of l'Environnement, de Green Economy and and 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 Organisation
<b>PANA</b>	Programme d'Action National d'Adaptation à la variabilité et aux climate change
<b>GDP</b>	Gross Domestic Product
<b>PIUP</b>	Industrial Processes and Product Use
<b>PMA</b>	Least Developed Countries
<b>NAP</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 Census of Population and Housing
<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 Sustainable Development. Sustainable development

## FOREWORD

Le Burkina Faso, avec la ratification de l'Accord de Paris sur le climat, s'est résolument engagé, à réduire ses émissions de Gaz à effet de serre (GES) tout en renforçant la résilience de ses populations aux changements climatiques. Pour ce faire, le pays a pris l'engagement, dans sa Contribution Déterminée au niveau National (CDN) pour la période 2015-2020 de réduire, à l'horizon 2030, ses émissions de GES de 21 574,63 Gg, soit 18,2% par rapport au scénario de référence. L'évaluation de la CDN a permis de relever une réduction globale de 46399,57 Gg grâce à la mise en œuvre d'actions d'atténuation et d'adaptation planifiées à cet effet. Ce résultat vient convaincre le Burkina Faso qu'un engagement plus soutenu d'appuyer la mise en œuvre des actions d'adaptation et de résilience est un gage de combiner les impératifs de réduction des émissions de GES à ceux du renforcement de la résilience des populations et des secteurs vulnérables.

Dans la présente CDN dont l'élaboration s'est voulue participative et inclusive de toutes les parties prenantes à la lutte face aux changements climatiques, l'Etat burkinabè s'engage à réduire ses émissions de GES de 31682,3Gg à l'horizon 2030 soit 29,42% par rapport au scénario de référence. La mise en œuvre d'actions d'adaptation pourrait permettre également une réduction de 33072,72 Gg soit 30,76% par rapport au scénario de référence. Le cout global de la présente CDN se chiffre à 4 124 231 753 US\$ dont 2 527 863 277US\$ à rechercher.

Le Burkina Faso, pour l'élaboration de ce référentiel a bénéficié de l'appui des membres du NDC Partnership. Il s'agit notamment de l'Institut Mondial pour la Croissance Verte(GGGI), du Programme des Nations Unies pour le Développement(PNUD), du Gouvernement Fédéral Belge, du Programme des Nations Unies pour l'Alimentation et l'Agriculture (FAO), de la Coopération néerlandaise (SNV), du Climate Analytics, de la Coopération allemande à travers la GIZ, du Programme des Nations Unies pour l'Environnement (PNUE). Je voudrais, au nom du Gouvernement, remercier tous ces partenaires techniques et financiers dont l'apport a permis au Burkina Faso de disposer d'une CDN avec des engagements plus ambitieux que celle de 2015. Ma reconnaissance va également à l'endroit de la société civile et du secteur privé dont la mobilisation à côté de l'Etat a permis de renforcer le caractère participatif et inclusif de l'élaboration de la présente CDN.

L'Etat burkinabè réitère son engagement de tout mettre en œuvre avec l'accompagnement de ses partenaires pour l'atteinte des objectifs chiffrés contenus dans la présente CDN.



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

# NDC PARTNERSHIP





## EXECUTIVE SUMMARY

Burkina Faso, which is highly vulnerable to the effects of climate change, has opted to contribute to the global effort to stabilise greenhouse gas (GHG) concentrations in the atmosphere. This commitment has materialised in the ratification of the United Nations Framework Convention on Climate Change, the Kyoto Protocol to the Convention and the Paris Climate Agreement. The country demonstrated its commitment to reducing GHG emissions by submitting its Nationally Determined Expected Contribution (NDEF) 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 by 2030 of 21,574.63 Gg CO<sub>2</sub>eq, or 18.2% compared with the reference 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 2015–2020, Burkina Faso projected a reduction of 5,133 Gg CO<sub>2</sub>eq, or 5.58% in the unconditional scenario, and 1,0953 Gg CO<sub>2</sub>eq, or 11.9% in the conditional scenario, for mitigation actions.

The assessment of the NDC 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 2015–2020 period 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 was 43,707 Gg CO<sub>2</sub>eq in 2030, was achieved by 89% in 2020, i.e. a reduction of 38,898 Gg CO<sub>2</sub>eq of GHG. Thanks to the implementation of adaptation actions, Burkina Faso has been able to meet its commitments to reduce its GHG emissions by 2025. This situation further convinces the country that financing its adaptation actions is a source of greenhouse gas emission reductions. The low level of achievement of the conditional scenario can be explained by the difficulties encountered in mobilising resources.

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 Organisation (SNV), the German Development Cooperation (GIZ), Climate Analytics, the Food and Agriculture Organisation of the United Nations (FAO) and the United Nations Environment Programme (UNEP). Burkina Faso has also adopted a participatory and inclusive approach to revising its NDC, involving stakeholders from the public and private sectors, NGOs and associations at central, decentralised and devolved levels.

Following the evaluation of its first NDC, which identified its strengths and weaknesses, the country has carried out a number of activities to make its new NDC more effective.

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

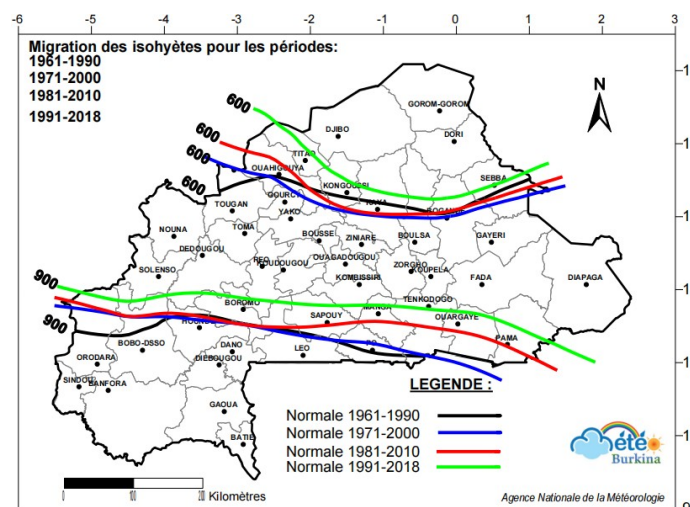
As part of its new ambitions, Burkina Faso has considered an unconditional scenario and a conditional scenario. In relation to its mitigation actions, the country is committed to reducing its GHG emissions by 31682.3 Gg CO<sub>2</sub>eq by 2030, i.e. 29.42% compared with the Business As Usual scenario. 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 with the 2015 NDC of 18.2%, Burkina Faso has raised its ambitions by 11.22%. To achieve this target of 29.42%, an amount of US\$449,118,465.3 has been earmarked for the unconditional scenario, compared with US\$885,670,522 for the conditional scenario, giving a total 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 with an estimated GHG emissions reduction potential of 33072.72 Gg CO<sub>2</sub>eq, or 30.76% compared with the Business As Usual scenario. This potential is broken down into an unconditional scenario (20.67%) and a conditional scenario (10.08%). The implementation of actions in the unconditional scenario amounts to US\$ 1,147,250,011, compared with US\$ 1,640,812 in the conditional scenario. US\$ 864 for the conditional scenario, i.e. a total of US\$ 2,788,062,875.

The estimated financial requirements for implementing the NDA amount to US\$4,124,231,753, of which US\$1,596,368,476 has already been acquired and US\$2,527,863,277 is still to be found. The gender-specific actions included in the amount to be sought amount to US\$ 1,379,891.

## I. NATIONAL CONTEXT

Burkina Faso is a Sahelian country in West Africa. It lies 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, with an average density of 74 inhabitants per km<sup>2</sup>, according to the 2019 General Census of Population and Housing (RGPH). Rural areas are home to 73.7% of the country's population, who make their living mainly from exploiting natural resources. The GDP growth rate averaged 6.2% per year between 2016 and 2019, and the incidence of poverty fell 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 highly variable and irregular rainfall that decreases from south-west to north, alternating between a long dry season (October to May) and a short rainy season (June to September). Temperatures also vary greatly depending on the time of year, with large diurnal variations. These climatic disturbances result in a migration of isohyets and isotherms. The average annual temperature has shown 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).



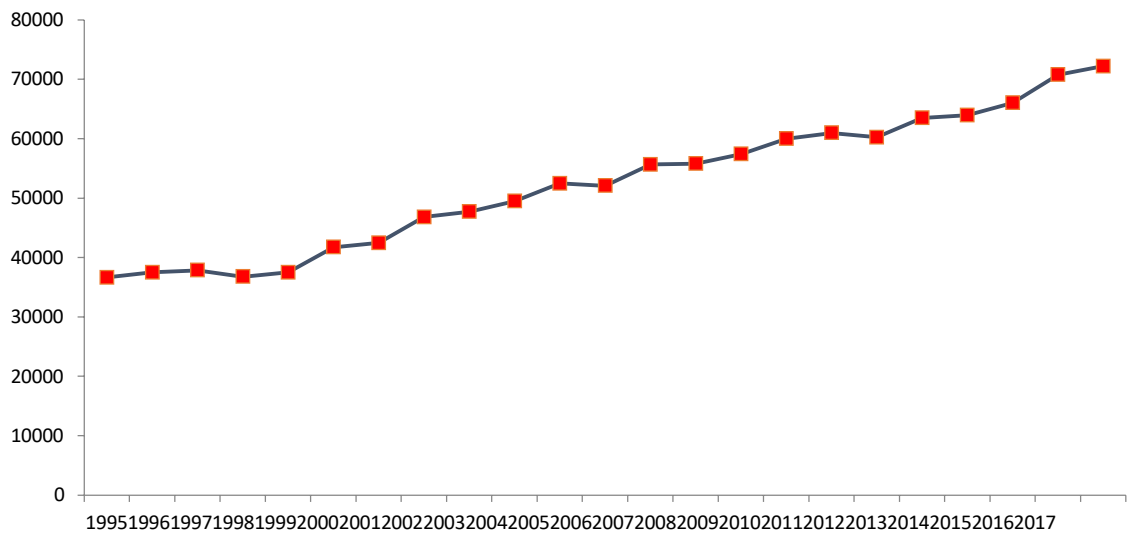
**Figure 1: Migration of isohyets**

*Source: French National Meteorological Agency*

The projected climate risks indicate that for Burkina Faso, climate variability and change will have significant and definite negative repercussions on key socio-economic development sectors, such as agriculture, livestock farming and fisheries,

exploitation of forest products, etc. Against this backdrop of climate vulnerability, the achievement of the country's Sustainable Development Goals (SDGs) could be seriously compromised, with an impact on gender inequalities, given that the national economy is essentially based on the primary sector.

National GHG emissions in Burkina Faso showed an upward trend between 1995 and 2015. Emissions rose 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: Change in 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 was observed in all the sectors covered by the national GHG emissions inventory. Emissions from the Agriculture, Forestry and Other Land Use (AFAT) sector rose by 69%, those from the Energy sector by 8%, those from the Waste sector by 2% and those from the Industrial Processes and Use of Chemical Products (IPUP) sector by 1%.

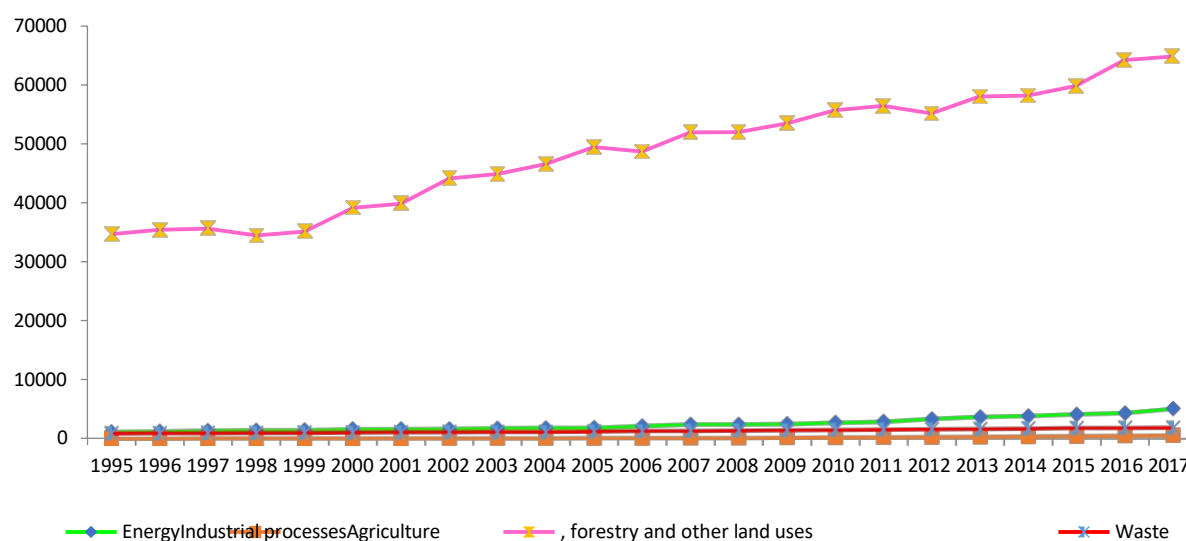
**Table 1: GHG emissions in Gg CO<sub>2</sub>eq**

Sectors	1995	2015	Growth (%)	Rates annual (%)	Projection 2025	Projection 2030	Projection 2050
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 other land use (AFAT)	34 645,86	59 832,82	73	3	80 410,31	88 395,68	168 361,32
Waste	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.*

Increases in emissions can be explained, among other things, by the increase in agricultural land, the reduction in forest land and the increase in livestock numbers.

Between 1995 and 2015, the AFAT sector contributed at least 90% of national GHG emissions.



**Figure 3: Change in national GHG emissions by sector from 1995 to 2017.**

*Source: National GHG inventory, 2021*

If we analyse GHG emissions by sector, the AFAT 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%. While 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 by 2050.

In the energy sector, GHG emissions rose from 1,115.45 Gg CO<sub>2</sub>eq in 1995 to 4,035.42 Gg CO<sub>2</sub>eq in 2015. If the rate of increase of 2.62 is maintained, 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.

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

Although the GHG emissions of the OUI sector are low, it is recording a strong growth rate of 4,378%, rising 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 OUI sector will emit 6,115 Gg CO<sub>2</sub>eq in 2030 and 239,007.99 Gg CO<sub>2</sub>eq in 2050.

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

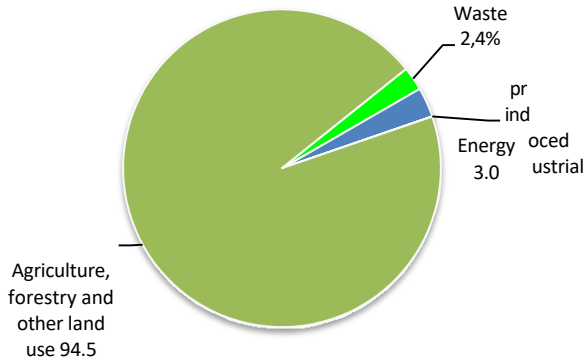


Figure 4: Breakdown of GHG emissions by sector in 1995

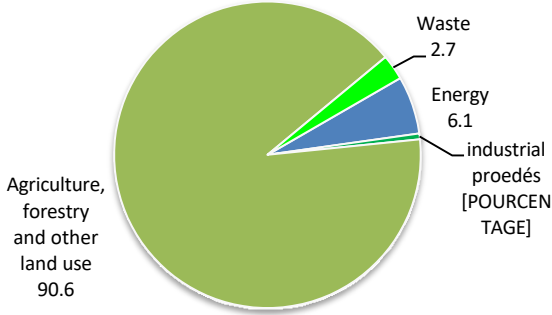


Figure 5: Breakdown of GHG emissions by sector in 2015

Source: National GHG inventory, 2021

In an overall analysis, we note that in 2015, the weight of the AFAT sector (90.6%) in total national GHG emissions decreased slightly. By contrast, the energy (6.1%) and industrial processes (0.6%) sectors increased. GHG emissions at

emissions from the waste sector remained virtually stable at 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 recorded increase in GHG emissions in both sectors (energy and industrial processes) is justified by the country's ongoing industrialisation and the increase in the number of cars on the road.

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

In its first NDC, Burkina Faso set its GHG reduction targets at 21,574.63 Gg CO<sub>2</sub>eq by 2030, or 18.2% compared with 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 2015–2020, Burkina Faso projected a reduction of 5.58% in the unconditional scenario and 11.9% in the conditional scenario for mitigation actions.

The assessment of the NDC 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 2015–2020 is 91.37% for the unconditional scenario and 24.36% for the conditional scenario. The low level of achievement for the conditional scenario can be explained by the difficulties encountered in mobilising resources. With regard to adaptation actions, the country's commitment in terms of GHG reductions, which amounted to 43,707 Gg CO<sub>2</sub>eq in 2030, was achieved by 89% in 2020, i.e. a reduction of 38,898 Gg CO<sub>2</sub>eq of GHGs. In addition, the evaluation showed that the gender aspect of some of the projects reported remains weak. In some cases, women represented between 17% and 52% of beneficiaries, and young people between 22% and 27%.

## **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 the UNDP's Climate Promise. Several Technical and Financial Partners, members of CAEP, have mobilised 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 provide Burkina Faso with a more ambitious, relevant and realistic NDC, an inclusive and participatory approach has been adopted, involving all stakeholders from the public and private sectors, NGOs and associations, at central, decentralised and devolved levels. A communication was made to the Council of Ministers to this effect.

This revision, it should be remembered, is based on Article 4 of the Paris Agreement, which calls on the Parties to the Agreement to submit a new NDC every five years, with the aim of increasing the reduction of GHG emissions.

The first activity of the review was a qualitative and quantitative assessment of Burkina Faso's first NDC. It identified the strengths and weaknesses of this NDC and made recommendations to improve the clarity, transparency and understanding of Burkina Faso's new NDC. A number of activities have been identified for inclusion in the new NDC and stem from the country's policy, plan and strategy documents, projects and programmes.

A number of activities were carried out to establish the new mitigation and adaptation commitments in the new NDC. These included the following activities:

- Assessment of the GHG emission mitigation potential of the NDC sectors using the revised IPCC 2006, EX-ACT and GACMO tools;
- an estimate of the costs and benefits of the various adaptation and mitigation actions envisaged in the new NDC for projects and programmes in the AFAT and energy sectors (other projects have not, however, been the subject of this assessment, but the socio-economic benefits associated with their implementation have been highlighted);
- the definition of targets and indicators for the actions selected for the CDN ;
- 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 CDN ;
- the development of gender-sensitive sectoral CDN plans;
- the production of a summary NDC taking into account the various deliverables;



- validation of the NDC at a national workshop, review by the National Development Planning Commission, adoption by the Council of Ministers and submission to the UNFCCC Executive Secretariat;
- capitalising on the NDC review process.

### III. AMBITIONS FOR REDUCING BURKINA FASO'S GREENHOUSE GAS EMISSIONS

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

- **carbon dioxide (CO<sub>2</sub>)**: this is the most abundant greenhouse gas and comes from 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)**: this is produced when fertilisers are applied to the soil as part of the farming process.  
agricultural activities in particular. It has a warming power 310 times greater than carbon dioxide.
- **methane (CH<sub>4</sub>)**: this is produced by enteric fermentation, digestion, etc.  
ruminants, landfill sites and waste water treatment. It heats up 21 times more than carbon dioxide.
- **Fluorinated gases**: these gases are used as refrigerants, electrical insulators or as a source of heat. 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 Burkina Faso's national GHG inventories. They are 1300 times more warming 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>.

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

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

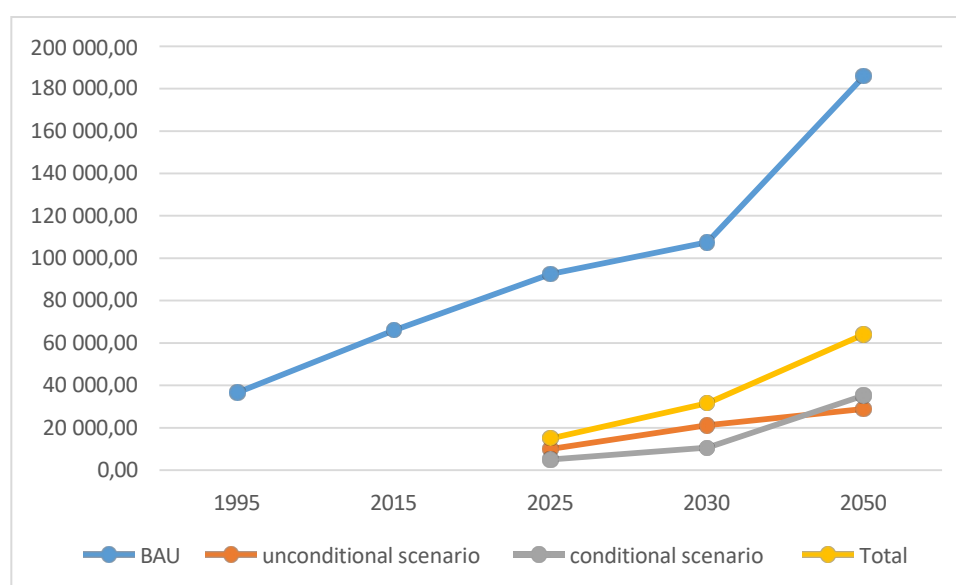
The contribution of the mitigation actions selected to the potential reduction in GHG emissions, both conditional and unconditional, is presented in Table 2. The potential reduction in GHG emissions is estimated in relation to the BAU, whose values are 92511.38 Gg CO<sub>2</sub>eq in 2025, 107 522.71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

**Table 2: Summary of potential reductions in CO<sub>2</sub> eq compared with 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 shown in the graph below.



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

Source: SP/CNDD

Table 2 shows that Burkina Faso is committed to a reduction of 16.25% by 2025 and 29.42% by 2030. This represents an increase in the country's ambitions compared with the first NDC, which was 18.2% by 2030. Burkina Faso is also committed to reducing its GHG emissions by 34.43% by 2050.

### 3.1.1. Contribution of the AFAT sector to reducing GHG emissions

The potential for reducing GHG emissions in this sector is shown in Table 3.

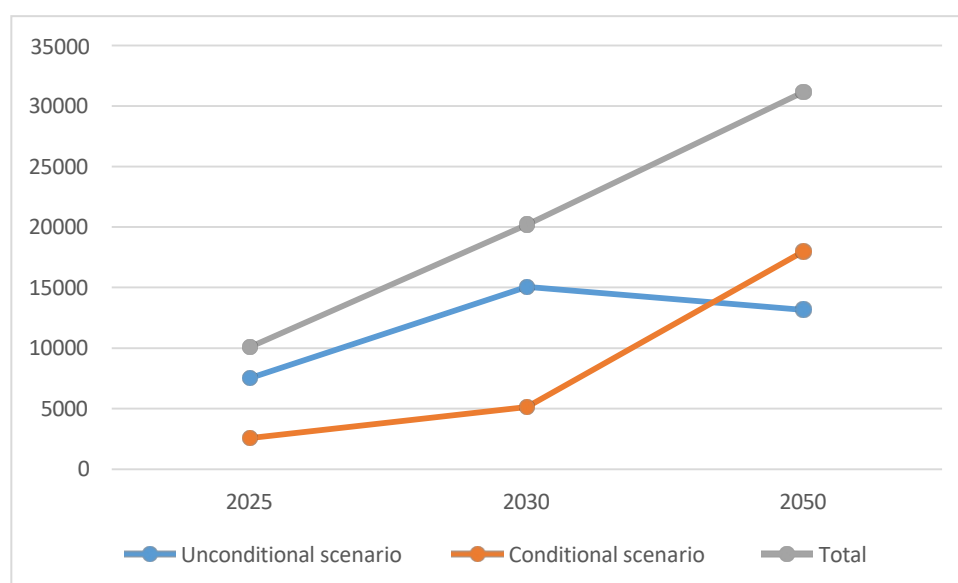
**Table 3: Contribution of the AFAT sector to reducing GHG emissions**

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 estimated reduction potential for the AFAT sector is 10,096.8 Gg CO<sub>2</sub>eq, including 7,527.3 Gg CO<sub>2</sub>eq for actions in the unconditional scenario and 2,569.5 Gg CO<sub>2</sub>eq in the conditional scenario by 2025.

Implementing the mitigation actions in the unconditional scenario for the AFAT sector will result in an 8.13% reduction by 2025 compared with the trend scenario, while the actions in the conditional scenario will result in a 2.77% reduction in total national GHG emissions in 2025. Together, the two scenarios will contribute to a substantial 10.91% reduction in national GHG emissions by 2025. Looking ahead to 2050, implementation of the projects will lead to a 16.76% reduction in overall greenhouse gas emissions for the two scenarios.



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

Source: SP/CNDD

The AFAT sector is the largest sector in terms of GHG sequestration potential in Burkina Faso. As a result, reforestation and the preservation of natural resources are the actions that will enable the country to increase its ambitions.

### 3.1.2. The energy sector's contribution to reducing greenhouse gas emissions

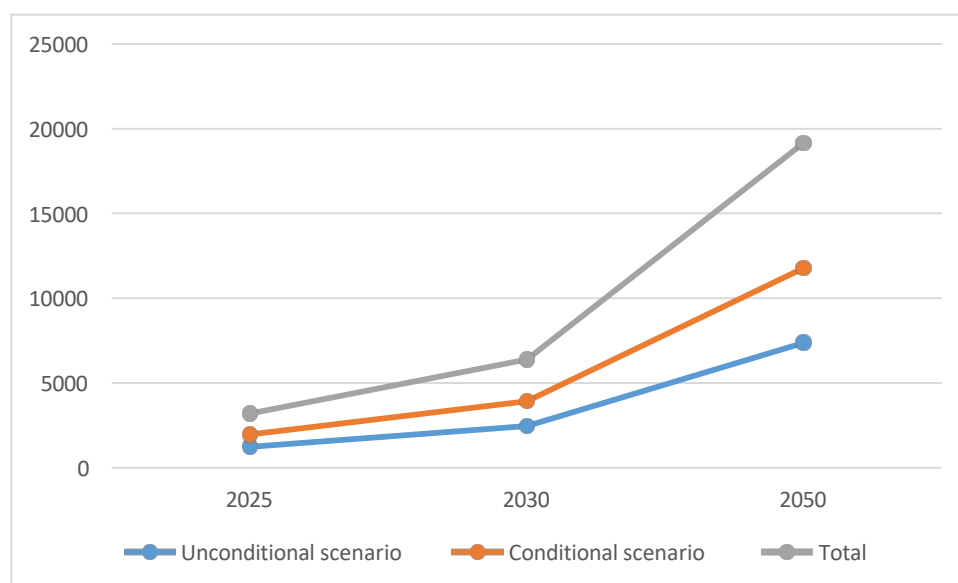
The results in terms of sequestration of GHG emissions in the energy sector are presented in Table 4.

**Table 4: Contribution of the Energy sector to reducing 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 from the actions of the unconditional scenario and 1,964.051 Gg CO<sub>2</sub>eq from the actions of the conditional scenario. Figure 8 shows the evolution of the different scenarios for the energy sector.



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

*Source: SP/CNDD*

### 3.1.3. The transport sector's contribution to reducing greenhouse gas emissions

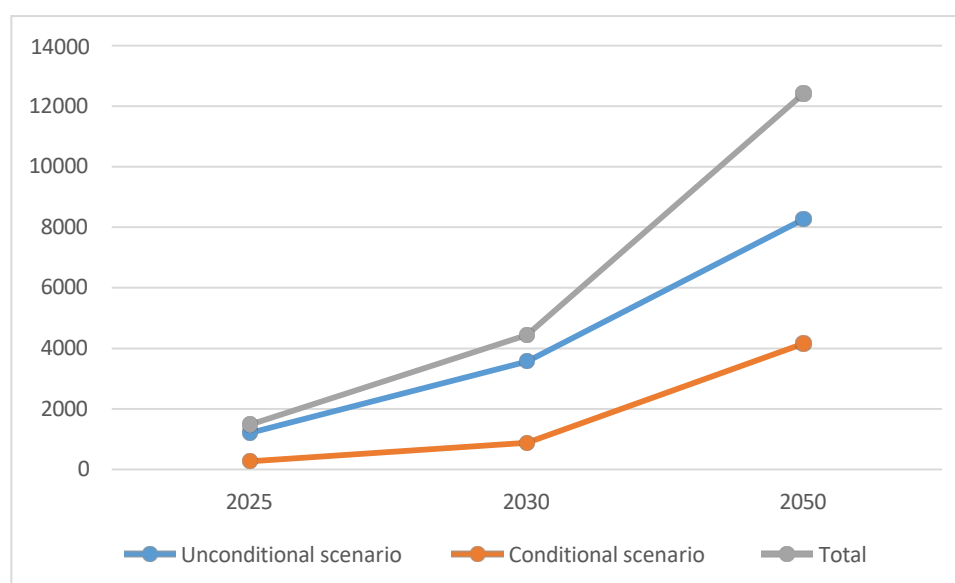
For the transport sector, the potential for sequestering GHG emissions is presented below in Table 5.

**Table 5: Contribution of the Transport sector to reducing 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 financing (conditional) 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 potential for sequestering CO<sub>2</sub> emissions 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. The waste sector's contribution to reducing greenhouse gas emissions

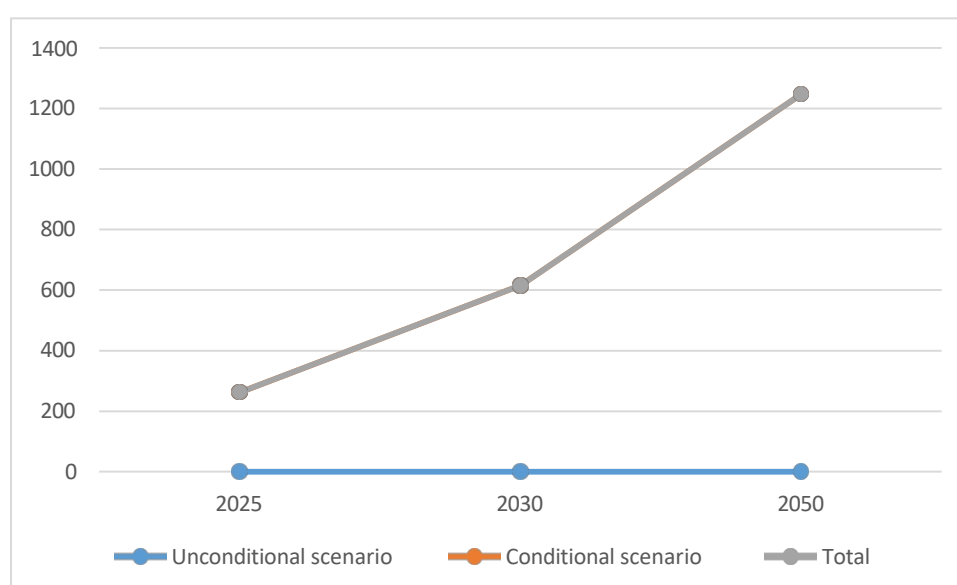
The waste sector contributes to the reduction of GHG emissions through certain actions. Table 6 shows the quantities of GHG sequestered in the unconditional and conditional scenarios.

**Table 6: Contribution of the waste sector to reducing 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 GHG that could 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 reducing greenhouse gas emissions in the CDN through actions to adapt to the effects of climate change**

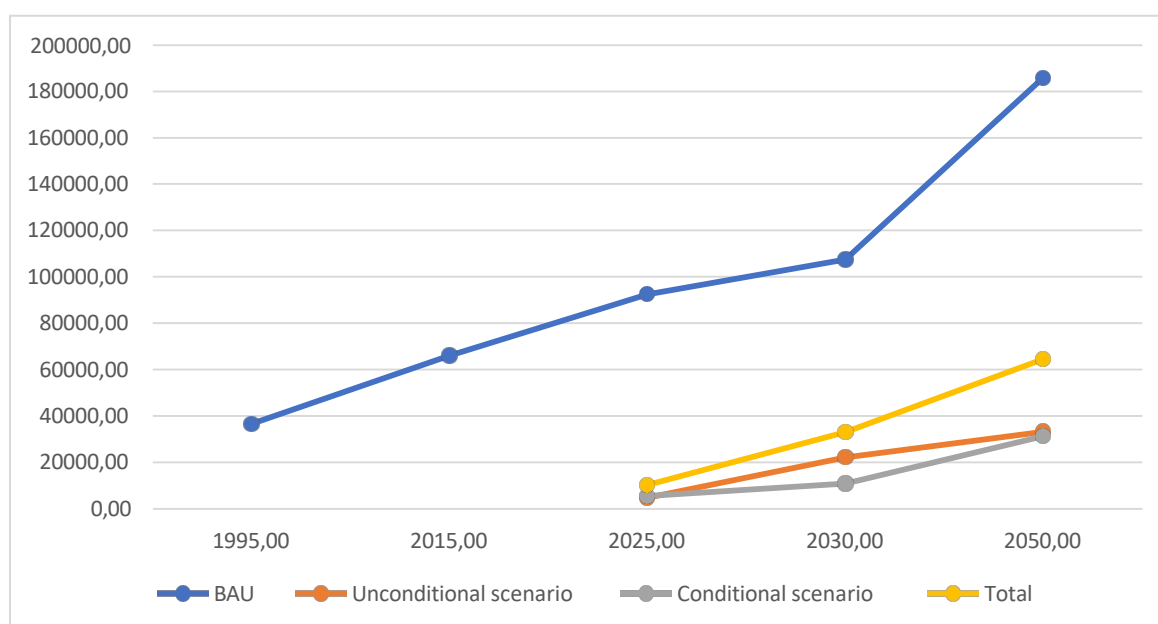
Burkina Faso, aware of its vulnerability to climate change, has developed a culture of resilience in several sectors. These actions, while strengthening the climate resilience of populations, also contribute to the reduction of GHG emissions. The contribution of the selected adaptation actions to the potential reduction in 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 with 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 of the table are shown in the graph below.



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

Source: SP/CNDD

The emissions 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 2,230.08 Gg CO<sub>2</sub>eq for actions under the unconditional scenario and 10,842.62 Gg CO<sub>2</sub>eq for actions under the conditional scenario.

#### IV. SECTORAL STRATEGIES AND PRIORITY MEASURES

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

#### **4.1. Cost-benefit analysis**

The cost-benefit analyses covered projects and programmes in the energy, transport and AFAT sectors. The 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 will save nearly US\$22 million in the short term (2025). Including the actions in the unconditional scenario, these savings exceed US\$250 million, or 24% of the investment expenditure (including management costs) that would be mobilised to implement all the actions. In the medium term (2030), the two scenarios indicate a much higher saving than that obtained in the short term, i.e. around US\$760 million. In the long term (2050), the savings obtained almost entirely cover 98% of all the expenditure required to implement and maintain all the actions selected in this sector.

For the transport sector, monetising the benefits of implementing actions to reduce GHG emissions requires assigning a price to the 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 Programme (PNB-BF 2020) and Gold standard 2020.

Projects in the forestry, agriculture and livestock sectors carried out at regional level have highlighted the socio-economic benefits associated with their implementation in the NDC.

The table below summarises the costs of implementing the CDN actions.



**Table 8: Summary of NDC implementation costs**

Options	Sectors	Cost of implementing actions		
		Scenario unconditional	Scenario conditional	Total
Attenuation	AFAT	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
	Waste	-	166 228 399	166 228 399
<b>Sub-total mitigation</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>Sub-total 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>Type</b>		-	1 379 891	1 379 891
<b>Total 2</b>			<b>1 379 891</b>	<b>1 379 891</b>
<b>Cost of CDN</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 (in particular through diversified crops, better retention of organic carbon and water in the soil, improved productivity and resilience), disaster risk reduction and more natural jobs and livelihoods. The full socio-economic benefits of implementing the different sectors of the NDC are appended to the document (Appendix 4).

### **4.3. Adaptation support sectors**

Several actions have been identified in the so-called support sectors (health, research, gender, infrastructure). Although these actions do not contribute directly to reducing greenhouse gas emissions, they do make a significant contribution to the socio-economic development of local communities and improve their resilience.

The major initiatives undertaken by the government to reform the health care system, invest in improving medical technology, build the capacity of healthcare staff and construct health infrastructure are all efforts that have been made, but cannot be evaluated in terms of carbon sequestration potential.

Although the infrastructure sector helps to improve people's living conditions, it has not been assessed for its potential to reduce greenhouse gas emissions under the NDC.

Taking gender and social inclusion into account, the NDC is part of this process, which will certainly help the country to achieve its commitments. Social inclusion and gender mainstreaming must guide the implementation of the actions contained in the NDC and thus promote the reduction of greenhouse gases.

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

## **V. FRAME OF TRANSPARENCY, FROM REPORTING AND PROGRESS MONITORING**

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 the sectoral players.

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

### **5.1. Indicators for monitoring the implementation of the CDN**

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

and sanitation, transport, energy and livestock). A list of these indicators can be found in Appendix 5 of the document.

## **5.2. Institutional arrangements for implementing CDN**

The Ministry of the Environment, Green Economy and Climate Change (MEEVCC) will provide leadership by setting up a Coordination Unit that will work closely with the focal points designated in the other ministerial departments. These are: (i) the Ministry of Agriculture; (ii) the Ministry of Water; (iii) the Ministry of Animal Resources; (iv) the Ministry of Housing and Urban Development; (v) the Ministry of Infrastructure; (vi) the Ministry of Health; (vii) the Ministry of Energy; and (viii) the Ministry of Transport;

In addition, the Coordination Unit will work in synergy with local authorities, NGOs, the private sector and with cross-cutting ministries, 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 purposes of funding agreements. It should therefore have a manual of administrative procedures and a harmonised system for monitoring and evaluating projects, detailing the main responsibilities and objectives assigned.

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

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

### **5.3.1. Monitoring system**

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

In operational terms, the indicators selected will be compiled with the help of the focal points and capitalised on by a Coordination Unit set up for this purpose. The Coordination Unit is chaired and run by the SP/CNDD. Collaboration protocols for data sharing will be drawn up and signed by the sectoral players to facilitate data collection.

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

- **an "adaptation" technical body**, which will be responsible for capitalising on data from the management units of the NDC adaptation projects;
- **a "mitigation" technical body** that will capitalise on data from the management units of the CDN's mitigation projects;
- **a support body responsible for** developing the partnership to implement and monitor the projects.

The sectoral ministerial departments will work to capitalise on the information collected by local authorities, NGOs and CSOs in their areas of intervention.

### **5.3.2. Assessment system**

Under the provisions of the Paris Climate Agreement, the NDC is reviewed on a five-year cycle. As a result, it will be assessed when it is revised. However, it may be subject to an interim review.

### **5.3.3. Progress monitoring framework**

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

The Ministry in charge of the environment will coordinate an ad hoc committee made up of all the competent bodies to set up an effective MRV system. Among other things, this will involve monitoring: (i) increasing renewable energy in the national grid's electricity generation mix; (ii) improving energy and resource efficiency in the various sectors; (iii) increasing vegetation cover; (iv) promoting clean, efficient and sustainable energy technologies to reduce excessive dependence on fossil fuels and unsustainable biomass; (v) the adoption of efficient, low-carbon transport systems; the adoption of climate-smart agriculture and efficient livestock management; and (vi) the progression of sustainable waste management systems.

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

## **VI. IMPLEMENTATION MECHANISMS**

To fully implement the CDN's actions, Burkina Faso will need grants and other multilateral and bilateral conventional financing, support for technical and operational capacity building, and technology transfer.

Technical and financial partners will be sought to support the implementation of the NDC investment plan and communication strategy. In a difficult economic context aggravated by the COVID-19 pandemic, Burkina Faso will adopt a global, holistic and multi-sectoral approach to low-carbon development that is resilient to climate change and takes gender into account.

### **6.1. Financial requirements**

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

In order to achieve the 29.42% target, an amount of US\$ 449,118,465.3 has been earmarked for the unconditional scenario, compared with US\$ 885,670,522 for the conditional scenario, giving a total amount of US\$ 1,334,788,987.

The country has therefore taken the option of strengthening its adaptation and resilience by implementing actions with an estimated potential to reduce GHG emissions by 33,072.72 Gg CO<sub>2</sub>eq, or 30.76% compared with the Business As Usual scenario. This potential is broken down into an unconditional scenario (20.67%) and a conditional scenario (10.08%). Implementation of the actions in the unconditional scenario will cost US\$1,147,250,011, compared with US\$1,640,812,864 for the conditional scenario, i.e. a total of US\$2,788,062,875.

Funding requirements for GHG emissions reduction (mitigation and adaptation) amount to US\$4,122,851,862. In relation to gender, which is a cross-cutting issue, the specific funding requirements for GHG reduction initiatives amount to US\$1,379,891.

US\$. All in all, CDN's financial requirements amount to US\$4,124,231,753.

## 6.2. Capacity building and technology transfer

Capacity building aims to equip the various players involved in implementing the NDC with knowledge of the MRV system, resource mobilisation mechanisms and the content of the NDC in general.

The strategy will essentially consist of

- information, awareness-raising, education and training initiatives to help people understand the issues surrounding climate change, provide solutions in terms of adaptation and mitigation measures or obtain the means to implement them (climate finance, clean and/or adaptive technologies, etc.);
- Analyses or studies to determine the potential of actions and the need to implement mitigation and/or adaptation measures;
- support for the preparation and submission of documents required by the international transparency framework. These documents include inventories of 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 drafting of legislative and/or regulatory texts for internal implementation measures;
- support for participation in international climate negotiations;
- promoting the development and transfer of environmentally friendly technologies (low- or no-carbon and/or resilience-building) to enable Burkina Faso to contribute to the global response to climate change.

## 6.3. Resource mobilisation strategy for the implementation of the NDC

The mobilisation of resources is crucial to the effective and efficient implementation of the priority projects identified under the NDC.

Sources of funding for the implementation of the NDC will be sought both nationally and internationally. The following sources of funding will be explored:

- **State resources:** funding for the CDN should come primarily from the State budget, where a budget line should be created. The

The local authorities (Communes and Regions) could also contribute to the implementation of the NDC. Local authorities (Communes and Regions) could also contribute to the implementation of the NDC, not only by ensuring that their actions are integrated into the planning of Communal Development Plans (CDP) and Regional Development Plans (PRD), but also by providing resources for their implementation.

- **bilateral partners:** funding from bilateral cooperation can be mobilised to support the implementation of the NDC. The excellent relations between Burkina Faso and countries that have made climate action financing their priority can be put to good use in carrying out the actions of the NDC.
- **Multilateral partners:** multilateral institutions and multilateral funds created under and outside the United Nations Framework Convention on Climate Change (UNFCCC) can be mobilised to support the financing of the implementation of the NDC.
- **the private sector and non-governmental organisations:** the private sector will be involved in mobilising resources for the NDC, in particular through the Public Private Partnership (PPP). This partnership has made it possible to carry out certain projects in the renewable energy sector. Non-governmental organisations (NGOs) are also key partners in the fight against climate change and are therefore a source of financial or technological resources for the implementation of the NDC.

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

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

In addition, in order to mobilise more funding to support the implementation of the NDC, the Government of Burkina Faso will initiate communications, government and parliamentary seminars and round tables on the NDC for the various stakeholders, and will present the NDC's recommendations.

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

Similarly, to ensure good coverage of the CDN's actions and initiatives, media men and women need to be trained and involved.

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

Burkina Faso's new commitment to help achieve the objective of the Paris Agreement comes against a backdrop that could compromise its reduction ambitions. The insecurity experienced in some parts of Burkina Faso since the beginning of 2016 could increase the country's vulnerability and have a negative impact on the implementation of the actions planned in the revised NDC. Depending on the actions in question, participatory approaches with stakeholders will make it possible to identify alternative options adapted to the circumstances.

In addition, the worldwide pandemic of COVID-19 is hampering investment by technical and financial partners and the private sector in all the priority actions for implementing the NDC. This situation could have an impact on the investment opportunities available to support the conditional objective of the NDC. Priority will be given to promoting the mobilisation of internal resources for the implementation of NDC actions.

Finally, political or institutional instability could have an impact on the achievement of the CDN's objectives. Awareness-raising activities will be directed at the new authorities.



## APPENDICES

## Appendix 1: List of mitigation actions

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO <sub>2</sub> eq)		
				2025	2030	2050
AFAT	Unconditional	Support project for forest-dependent populations 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 nutrient gardens for climate-smart diversification	5 700 000	1757,30	3514,50	12300,80
		100,000 hectares of Assisted Natural Regeneration in 25 communes in Burkina Faso	15 800 000	812,20	1624,50	5685,60
Energy	Unconditional	Acquisition and installation of 15,000 LED streetlights to replace high-pressure sodium and mercury streetlights for public lighting purposes	10 100 000	50,21	100,43	301,29
		Construction of solar power plants at Koudougou (20 MWp) and Kaya (10 MWp) with a capacity of 30 MWp, including reinforcement of the 220 km grid (Yeleen)	73 952 490	231,79	463,58	1390,74
		Construction of a 15 MWp photovoltaic solar power plant in Essakane	30 000 000	115,89	231,79	695,37
		Construction of a 14 MWp solar photovoltaic power plant in Matourkou with 6 MWh of storage capacity (KFW)	28 864 000	108,17	216,34	649,01
		Project to extend the Zagtouli photovoltaic solar power plant (17MWp)	46 000 000	131,35	262,69	788,08

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Project to acquire and install solar equipment in public buildings.	9 999 941	15,20	30,41	91,22
		Construction of the 6.29 MWp solar photovoltaic power plant at Dori (Yeelen).	21 306 000	48,60	97,20	291,59
		Construction of the 2.2 MWp solar photovoltaic power plant at Diapaga (Yeelen).	7 452 000	17,00	34,00	101,99
		Construction of the 1.13 MWp solar photovoltaic power plant in Gaoua (Yeelen).	3 828 000	8,73	17,46	52,38
		Solar energy project for off-grid CSPSPs.	670 000	1,08	2,16	6,48
		Solar electrification project for social and community infrastructure in 300 rural localities.	14 292 231	18,09	36,19	108,56
		Project to purchase and install efficient air-conditioning units to replace single-block units in public buildings.	370 000	0,40	0,80	2,41
		Solar backup project.	6 709 086	9,82	19,64	58,91
		Project to build a solar photovoltaic mini-power station with storage in a medical centre with a surgical unit (CMA).	7 226 448	9,97	19,93	59,80
		Acquisition and installation of 10,500 LED streetlights to replace high-pressure sodium and mercury streetlights for public lighting.	7 548 952	35,15	70,30	210,90

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Acquisition and installation of 3,000 LED streetlights to replace high-pressure sodium and mercury streetlights for street lighting in Ouagadougou (PASEL).	1 960 000	10,04	20,09	60,26
		Acquisition and installation of 1,500 LED streetlights to replace high-pressure sodium and mercury streetlights 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 43 MWp solar photovoltaic power plant in Ouagadougou (Ouaga Nord Ouest) (Yeleen).	145 650 000	332,23	664,46	1993,39
	Conditional	Project to build a solar power plant in Dédougou (18 MWp).	36 000 000	139,07	278,15	834,44
		Project to build 3 regional photovoltaic solar power plants with a combined capacity of 300 MWp, including 150 MWp in the 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) to households in Burkina Faso.	31 199	2,32	4,64	13,91
		Project to build a 10 MW biomass-waste power plant in Ouagadougou.	30 000 000	14,70	29,40	88,20

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Project to build a solar power plant in Pâ (30 MWp).	60 000 000	231,79	463,58	1390,74
		Project to build a solar power plant at Kalzi (30 MWp).	72 000 000	231,79	463,58	1390,74
		Building a solar power plant at Zano (24 MWp).	48 000 000	185,43	370,86	1112,59
Transport	Unconditional	Project to support the modernisation of the transport sector (PAMOSSET-FC) component: "Setting up a system for the sustainable renewal of the fleet".	140 000	486,00	1727,00	1727,00
		Greater Ouagadougou urban mobility project.	103 845	701,00	1695,00	5790,00
		Accra-Ouagadougou rail interconnection project.	2 666 472	23,00	141,00	748,00
	Conditional	Project to rehabilitate 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 to build the Kaya-Frontière Niger 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 using the existing line.	72 561	4,00	28,00	185,00
Waste	Conditional	Project to recover methane from wastewater treatment at the Kossodo WWTP.	72 784 000			
		Project to recover methane gas from CTVD landfill waste.	8 444 000			
		Project to convert 200,000 m <sup>3</sup> of sewage sludge into biogas.	15 000 000			

Sector	Scenario	Action/Project	Cost(USD)	Potential(GgCO2eq)		
				2025	2030	2050
		Project to build and extend wastewater treatment plants.	36 956 921			
		Project to build and extend sewage 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	Unconditional	Integration of climate change adaptation measures in the concerted management of the W-Arly-Pendjari cross-border complex (ADAPT WAP).	2 590 350			
		Preserving and combating the degradation of the Boulgou sacred hill and its surrounding area.	50 000			
		Project to support the restoration of ecosystems in the Lergho bush area through set-aside in the commune of Garango.	55 877			
		Amélioration des moyens d'existence durables en milieu rural" in the Boucle du Mouhoun and Centre Ouest regions of Burkina Faso.	5 481 000			
		Communal landscape management project for REDD+.	100 000 000	3500	19500	25000
		Beog Puuto	24 928 000			
		Weoog Paani	19 680 000			
		EU/Wakanda multi-sectoral support project for 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 small 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 (GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Restoring ecosystems to make local communities more resilient to climate change in the Great Green Wall project 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 catchment area.	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 Emissions Reduction Programme (REDD+ + Agriculture).	300 000 000			
		Pilot ecovillage 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 of the productivity agricultural by water and soil conservation (PACES).	16 779 380	118,5	236,9	710,7
		Projet d'appui régional à l'initiative pour l'irrigation au sahel-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 to develop and enhance the Léraba plain (PAVAL).	63 899 580			
		Agricultural development project 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
		Participatory natural resource management project for rural development in the North, Centre-North and East (NEER TAMBA).	122 829 550	353,7	707,5	2334,7
		Project improvement and of the securing (SECURAGRI).	4 800 000	131,2	262,4	656
		Projet d'Appui aux Filières Agricoles dans les régions du sud-ouest, des Hauts-Bassins, des Cascades et de la Boucle du Mouhoun (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 to develop 35,000 ha of lowlands and irrigated perimeters using the intensive rice-growing system (SRI).	160 000 000			
		Integrated development programme for the Samendeni valley, phase II (PDIS II): development of irrigated areas and recalibration of the Mouhoun river.	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
		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 (GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Projet d'Appui à la Mobilité du Bétail pour un meilleur Accès aux Ressources et aux Marchés (PAMOBARMA) in West Africa.	959 492	9,12	18,24	54,72
		Livestock farmers' resilience to crises (food and security) and climate change.	50 000 000	7,62	15,24	45,72
	Conditional	Rehabilitation of 225,000 ha of degraded land for agro-silvo-pastoral purposes.	71 000 000			
		Creation and sustainable management of 02 animal production intensification zones (ZIPA) in 2 regions of the country.	47 600 000			
		Mowing and conservation of 10,000T of coarse fodder per year (hay and crop residues).	17 830 189			
		Development of water points to preserve the banks of the Kou valley.	595 400	0,8	1,61	4,83
	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 of BF 2018-2022.	10 400 000			
Water and sanitation	Conditional	construction of a hydro-agricultural, electric dam at BASSIERI in Burkina Faso.	115 000 000	52,5	105	315
		Restoration, protection and enhancement of the Dem Lake.	102 000 000			
		Construction of a hydro-agricultural and hydroelectric dam at Banwaly.	59 416 751	50,06	100,12	300,36
	Unconditional	Project of works maintenance maintenance of the RN06 Ouagadougou-Nazinon Bridge.	11 585 368			
Infrastructure	Unconditional	Project to build the Poa crossing on the track linking Kyon to Poa.	1 060 168			
		Project to build a crossing structure at Kayao.	164 886			

Sector	Scenario	Action/Project	Cost (USD)	Potential (GgCO <sub>2</sub> eq)		
				2025	2030	2050
		Periodic earth road maintenance works project for 2019: lot 03: Construction works for crossing structures on the Zecco-Toungou track and in the commune of Pô.	129 844			
		Project for the construction of works and development of the RD55 bypass: Embr. Rn04-absouya.	2 717 770			
		Emergency programme works project for the rehabilitation and asphaltting of sections of road and crossing structures / lot 6: work on the Gutti dam (Ramsa-Séguenega).	9 401 166			
		Project to upgrade and asphalt urban roads in Koudougou (7 km + 2 crossing structures).	6 470 432			
		Project to build around 2.5 km of gutters to drain rainwater in Koudougou.	1 243 746			
Habitat	Unconditional	Reinforcement of the rainwater drainage network in the city of Ouagadougou, phase III: development of the outlet inside and downstream of the Bangr Weogo urban park.	24 000 000			
	Conditional	Mapping of areas à risk of flooding in agglomerations of more than 5,000 inhabitants (50 agglomerations).	84 211 000			
		Making the most of local materials and promoting wood- and tin-free housing to adapt 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
		Catering and development of the green belt green belt of Ouagadougou.	2 330 000	23,4		
		Energy efficiency in urban and rural housing.	1 753 200	40,527		
		Lomé-Ouagadougou-Niamey (LON) regional economic corridor project.	264 000	37	199	894

**Annex 3: List of potential socio-economic benefits of implementing actions in the various sectors of the NDC**

SECTOR	SOCIO-ECONOMIC BENEFITS
<b>Transport/Infrastructure</b>	the creation of temporary and permanent jobs;
	a fall in the number of road accidents;
	Saving travel time for business or leisure activities;
	the reduction in the number of flood victims ;
	improving people's quality of life;
	the long-term reduction in the cost of goods through the reduction in the cost of goods transport ;
	lower GHG emissions in the transport sector over the long term, leading to a Improved public health (reduced pollution-related illnesses) ;
<b>Waste</b>	increasing the energy supply ;
	improving people's living conditions;
	savings on electricity and fuel oil imports;
	the use of composting fertilisers for sewage sludge;
	sustainable management of agricultural fertilisers ;
	the use of compost ;
	methane recovery for a considerable reduction in greenhouse gas emissions;
<b>Agriculture</b>	setting up mechanisms for access to quality agricultural inputs, financing and advisory support;
	increasing agricultural productivity, production and income on a sustainable basis. for farmers, including women and young people;
	the creation of green jobs;
	increased income for women benefiting from projects;
	increasing the resilience of beneficiary populations to climate change climate ;
	reducing the risk of pollution of water sources and biodiversity by not use of herbicides due to low weed cover on drip-irrigated sites;
	development of irrigated areas;
	increasing the area of land farmed by developing lowland areas and recovery of degraded land ;
<b>Forestry</b>	sustainable management of forest resources and the contribution of forest-based industries to GDP ;
	Covering energy needs by extending forest management;
	restoring degraded resources and transferring powers to local authorities territorial ;
	strengthening the resilience of ecosystems and improving people's livelihoods in relation to climate change through setting up a multi-hazard early warning system and implementing practical adaptation measures;
	sustainable land management and improving the resilience of agroforestry households to climate change ;
	improving the resilience of the ecosystems of the River Niger and its populations by sustainable management of natural resources ;

SECTOR	SOCIO-ECONOMIC BENEFITS
	contributing to the sustainable management of conservation areas ;
	helping to achieve food security and preserve ecosystems natural ;
	sustainable restoration of plant cover to strengthen the resilience of populations and contribution to carbon sequestration ;
	support for the development of local forestry and environmental governance initiatives, increasing resilience to climate change and preserving forest resources;
<b>Breeding</b>	improved coverage of livestock feed requirements;
	improving plant cover ;
	improving the living conditions of agro-pastoralists;
	increasing grazing areas;
	increasing the number of functional pastoral areas;
	an increase in the area recovered ;
	job and income creation ;
	Reduced competition for natural resources;
	Fixing and protecting banks ;
	Reducing wood cutting ;
	reducing the risk of land degradation and conflict ;
	reducing animal health risks for transit/destination countries;
	securing pastoral activities ;

## Appendix 5: Inventory of NDC monitoring indicators and alignment with ODD targets

SECTORS	CDN MONITORING INDICATORS	ODD TARGETS CONCERNED
Energy	Number of items of equipment installed (efficient lamps and efficient air conditioners), power installed.	5.a, 5.b, 5.c and 13.b
Infrastructure	Physical/financial implementation rate (%); Proportion/lineage of roads upgraded; Proportion/lineage of gutters upgraded.	9.1 ; 9.a ; 11.5 ; 13.1 ; 19.b
Agriculture	Number of hectares of degraded land reclaimed, Number of hectares of irrigated perimeter developed, Number of hectares of lowlands developed, Surface 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	Surface area marked out, Surface area of degraded land recovered, Total surface area of functional grazing areas, Length of marked cattle track, Surface area of grazing areas secured.	1.a ; 1.4 ; 1.5 ; 2.1 ; 2.3 ; 2.4 ; 6.1 ; 9.1.
Water, Sanitation and Waste	Number of fecal sludge collection and treatment centres built; Number of water treatment plants built; Additional quantity of CO2 sequestered (tonnes); Quantity of biogas produced; Quantity of fecal sludge recovered as biogas; Quantity of greenhouse gases assessed; Quantity of methane recovered; Quantity of waste treated, Quantity of waste recovered; Quantity of waste disposed of.	5.5 ; 5.c ; 13.2 ; 13.3.
Habitat	Number of kilometres of culverts built; Number of built-up areas with mapped risk zones; Number of new construction technologies developed in the building sector; Proportion of local materials used.	1.4 ; 4.3 ; 5.b ; 5.1 ; 11.3 ; 4.3 ; 9.1 ; 10.3.
Transport	Achievement rate for daily weather forecasts, Number of vehicles taken off the road, Number of new buses put on the road, Length of railway line built.	5. b ; 5.c ; 5.5 ; 13.b ; 13.3 ; 11.2 ; 9.1 ; 13.3.
Environment	Quantity of greenhouse gases emitted reduced; Surface area of new agroforestry plantations established, Surface area of forests under management (for wood production); Number of seedlings planted, Surface area of new agroforestry plantations established, Number of conservation areas created by local authorities per year, Surface area on which RNA is practised, Number of good practices implemented in connection with adaptation.	1.5 ; 11.6 ; 13.1 ; 15.3 ; 15.4.