REPUBLIC OF NIGER



Fraternity - Work - Progress

CONTRIBUTION DETERMINED AT NATIONAL LEVEL

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS	ii
LIST OF TABLES	
LIST OF FIGURES	vi
SUMMARY	
INTRODUCTION	1
SUMMARY OF THE CDN	3
I. BACKGROUND	7
1. Emissions trends	7
2. Climate trends and associated risks	8
3. Precipitation trends	9
4. Temperature trends	10
5. Impacts and vulnerabilities	11
6. Fairness and ambition	12
II. ATTENUATION COMPONENT	13
2.1. Reference scenario	13
2.1.1. AFAT sector	13
2.1.2. Energy Sector	14
2.2. Mitigation measures	14
2.2.1. AFAT sector	14
2.2.2. Energy Sector	15
III. ADAPTATION COMPONENT	17
1. Priority adaptation measures by sector	17
IV. IMPLEMENTATION OF THE CDN	21
1. Political, institutional and organisational framework	21
2. Financing Mitigation	21
3. Financing Adaptation	22
4. Monitoring, Reporting and Verification of the NDC	23
VI. THE CDN'S CLIMATE GOVERNANCE REQUIREMENTS	25
1. National MRV system	26
2. Technology transfer	26
3. Mobilising financial resources	26
VII. OTHER INFORMATION	27
VIII. CONCLUSIONS	28
APPENDIY: Riblingraphical references	20

ACRONYMS AND ABBREVIATIONS

AFAT Agriculture, forestry and other Land use

AIC Climate-smart agriculture

AIE International Energy Agency

BAU Business As Usual

CAEP Climate Actions Enhancement Package

CC Climate change

ECOWAS Economic Community of West African States

CDN Contribution Determined at National Level

UNFCCC United Nations Framework Convention on Climate Change

CNEDD National Environment Council for Sustainable Development

CNI Initial National Communication

co₂ Carbon dioxide or carbon dioxide

COP Conference of the Parties

CR AGHRYMET Regional training and application centre for agrometeorology and

operational hydrology

CS-GDT Strategic Framework for Sustainable Land Management

DPNE National Electrification Policy Document

EBT Technology Needs Assessment Project

Ex-ACT Ex-Ante Carbon-balance Tool (software)

FA Adaptation Fund for LDCs

FEM Global Environment Facility

LDCF Small Farmers Adaptation Program funds

FSC Strategic Climate Funds

FTP Clean Technology Trust Fund

FVC (GCF) Green Climate Fund (Fonds Vert pour le Climat)

GACMO The Greenhouse Gas Abatement Cost Model

GDT Sustainable Land Management

GHG Greenhouse Gases

IPCC Intergovernmental Panel on Climate Change

Gg eqCO2 Giga grams of carbon dioxide equivalent

HCi3N Haut-Commissariat-Initiative "Les Nigériens Nourrissent les Nigériens"

("Nigeriens Feed Nigeriens")

IGES Greenhouse Gas Inventory

INS National Institute of Statistics

IRENA International Renewable Energy Agency

I3N Niger Feed Niger Initiative

CDM Clean Development Mechanism

MESUDD Ministry of the Environment, Urban Health and Sustainable Development

ME/LCD Ministry for the Environment and the Fight against Desertification

MNV Measurement, Notification, Verification (CDM, REDD...)

MRV Measurement, Reporting, Verification

MW Megawatt

MWp Megawatt peak

NAMA Nationally Appropriate Mitigation Actions (Actions Nationally

Appropriate Mitigation Actions)

NDC-Partnership Nationally Determined Contributions Partnership

SDGS Sustainable Development Goals

NGO/DDA Non-governmental organisation/Development Association

CSOS Civil Society Organisations

NAPA National Adaptation Programme of Action

PANEE National Energy Efficiency Action Plan PANER

National Renewable Energy Action Plan PDAE

Electricity Access Master Plan

ESDP Economic and Social Development Plan

ESMP Environmental and Social Management Plan

GDP Gross Domestic Product

PIC-CDN Climate Investment Plan for the implementation of the NDC

PIC-RS Climate Investment Plan for the Sahel Region

PMA Least Developed Countries

NAP National Adaptation Plan

NDEP National Domestic Energy Programme

NESDP National Environment Plan for Sustainable Development

PNEDD-2016 National Policy on the Environment and Sustainable Development (2016)

UNDP United Nations Development Programme

PP Partnership plan

PPRC Pilot Programme for Climate Resilience

GWP Global Warming Potential

PSRC Strategic Programme for Climate Resilience

PTF Technical and Financial Partners

QCN Fourth National Communication

CPR Representative Concentration Pathway scenario

RNA Assisted Natural Regeneration

SCN Second National Communication

SDDCI Sustainable Development and Inclusive Growth Strategy

SDDEL Sustainable Livestock Development Strategy

SNAE National Electricity Access Strategy

SNCCC National Communication Strategy on Climate Change

SNPA/CVC National Strategy and Action Plan on Climate Change and Climate

Variability

SNT National Transport Strategy

SPN2A National Strategy and Plan for Adaptation to Climate Change in the

Agricultural Sector (2020-2035)

SSE Monitoring and evaluation system

TCN Third National Communication

UTCATF Land Use, Land Use Change and Forestry

LIST OF TABLES

Table 1: Breakdown of emissions by sector according to National Communications	8
Table 2 : Breakdown of emissions by sector according to the Fourth National Communication (2014)	8
Table 3: Unconditional and conditional mitigation measures and technologies in the energy sector	15
Table 4: Impacts and adaptation measures in the AFAT sub-sectors	.17
Table 5: Mitigation financing costs	.22
Table 6: Cost of financing adaptation	23

LIST OF FIGURES

Figure 1: Simulation of changes in average rainfall totals during the rainy season (JJAS) for the short and medium term, compared with the 1981-2010 reference period. These results are the good form of simulations assured by with 20 stable to a stable from the stable was delicated as a stable from the	Э
median of simulations carried out with 29 global models from the global model intercompariso experiment (CMIP5) for the RCP 4.5 and RCP 8.5 scenarios. The values shown correspond to the percentage variation with respect to the reference cumulative precipitation	0
Figure 2: Differences in mean surface temperatures in Niger during the rainy season (JJAS), simulated over the short and medium term, compared with the 1981-2010 reference period. These results are the median of simulations carried out with 29 global models from the global	
model intercomparison experiment (CMIP5) for the RCP 4.5 and RCP 8.5 scenarios	

LIST OF GRAPHICS

Figure 1: Emissions trends in the AFAT sector over the period 2014-2030	13
Figure 2: Trend in energy sector emissions over the period 2014-2030	14
Graph 3: "Unconditional" and "conditional" reduction compared to BAU (2025- 2030)	16
Graph 4 : Financing flows by phase of implementation of the NDC in the energy sector	22
Graph 5: Flow of funding by NDC implementation phase in the AFAT sector	23

SUMMARY

Niger's Nationally Determined Contribution (NDC) is in line with the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Climate Agreement. It is aligned with national policies and strategies, in particular the SDDCI- Niger 2035, the PDES-2017-2021 and programmes/projects for the sustainable management of natural resources and access to modern energy services for all by 2030.

The process of revising Niger's NDC began in 2020 and the revised NDC is due to be submitted in 2021. As a member of the NDC Partnership since 2018, Niger is receiving technical and financial support for the revision of its NDC through the CAEP Initiative and the UNDP Climate Promise Initiative. The revision of the document and its translation into implementation plans (Partnership and Climate Investment Plans) and the Monitoring Evaluation-SES System, etc. are coordinated by the Ministry of the Environment and the Fight against Desertification (ME/LCD) through the National Committee in charge of revising and strengthening the NDC created by Order No. 0155/ME/SU/DD/SG of 31 August 2020.

The ESS is made up of two components (Mitigation and Adaptation). The Adaptation component has been completed and is housed within the ME/LCD. The Mitigation component is currently being finalised.

The revision of the NDC made it possible to i) take stock of the implementation of the 2015 commitments, ii) raise Niger's ambitions in terms of adaptation and mitigation on the basis of new emissions estimates for the key sectors (AFAT and Energy) and new climate projections. The reference year used for the GHG assessment is 2014, which was also the reference year used to draw up the QCN. The country's overall emissions were 28,777.299 GgCO2eq in 2014. The AFAT and Energy sectors remain the priority sectors for Niger, with respective GHG emission levels of 23,952.674 GgCO2eq or 88.30% and 3,833.789 GgCO2eq or 9.30% of total emissions for the same reference year of the QCN.

Partners (World Bank, UNDP, FAO, IRENA, Belgium, AFD, UNCDF and Save The Children) are supporting Niger in the CAEP process, as are IOM and ILO.

The methodological approach chosen for this review was intended to be participatory and inclusive of all stakeholders (government, research and training institutions, CSOs, private sector, TFPs). All the products of the various thematic studies delivered as part of the review were validated by the National Committee as they were being drawn up.

The revision of the NDA was carried out with a view to correcting the shortcomings identified in the 2015 NDA, such as the lack of an institutional framework guaranteeing the operationalisation and monitoring of the implementation of the objectives set, the system of communication, sharing and ownership at both national and regional level, the low level of mobilisation of financial resources, particularly the unconditional share of commitments, the plan to build the capacities of institutional players and to strengthen the partnership with TFPs.

The aim of the revision process is to address these shortcomings and to make the CDN the reference base for all climate-related actions by Niger and non

It also lays the foundations for close collaboration between government institutions on the one hand, and other stakeholders (TFPs, private sector, research institutions, CSOs) on the other.

At the end of this exercise, the revised NDC aims for 'unconditional' and 'conditional' reductions under the BAU baseline reference scenario for :

- the AFAT sector: Unconditional Reductions: 4.50% (BAU 2025) and 12.57% (BAU 2030) and Conditional Reductions: 14.60% (BAU-2025) and 22.75% (BAU 2030)
- Energy sector: Unconditional reductions: 11.20% (BAU-2025) and 10.60% (BAU-2030) and Conditional reductions: 48% (BAU-2025) and 45% (BAU-2030).

The implementation of Niger's Contribution is estimated, for the period 2021-2030, at a total cost of USD 9.9081 billion, including for :

- adaptation: USD 6.743 billion, of which USD 2.40 billion (36%) is 'Unconditional' and USD 4.343 billion (64%) 'Conditional';
- Mitigation: USD 3.1647 billion, of which USD 0.2127 billion (6.72%) is 'Unconditional' and USD 2.9524 billion (93.28%) is 'Conditional'.

The total 'Unconditional' and 'Conditional' cost of CDN amounts to USD 2.6127 billion (26.4%) and USD 7.2954 billion (73.60%) respectively.

Putting the new CDN into operation will require substantial financial, technological and logistical resources, as well as human capacity-building, provided that the support of the international community and climate finance is mobilised so that the objectives of economic and social development, the CDN and the Paris Agreement can be achieved.

INTRODUCTION

The update of the NDC for the period 2021-2030 sets out Niger's roadmap to help achieve the objective set out in the Paris Climate Agreement, namely to keep the rise in temperature below 2° C or even 1.5° C by 2050.

The four National Communications produced by Niger (CNI-1990, SCN-2000, TCN-2008, QCN-2014), and the NAPA and NAMA documents set out the measures taken with regard to GHG emissions and adaptation to climate change.

As part of the implementation of the Paris Agreement, Niger has set itself the objective of contributing to the reduction of global greenhouse gas emissions (target 2°C or 1.5° C by 2050) while pursuing its low-carbon socio-economic development that is resilient to the harmful effects of climate change. The NDC will also be implemented to contribute to the following national development objectives:

- Combating poverty;
- Ensuring food and nutritional security for the people of Niger;
- Promote the sustainable management of natural resources and the widespread use of renewable energies;
- Strengthening the resilience of ecosystems and communities.

The NDC is intended to be a strategic tool and a commitment by Niger to implement the Paris Agreement through targeted actions in priority sectors (AFAT, Energy). This priority is confirmed by the national GHG inventories carried out during the National Communications. In addition, all the studies have confirmed Niger's high exposure and vulnerability to climate change. In spite of this situation, Niger intends to contribute to the global effort through its updated NDC by taking increased mitigation and adaptation measures with strong co-benefits in terms of carbon sequestration and the reduction of GHG emissions.

This NDC is aligned with national policies and strategies (SDDCI-2035, PDES, 2017- 2021, i3N, CS-GDT,2014-2029, SPN2A, SNPA-CVC, SNAE, SNT) with a view to initiating a transition to a low-carbon economy that is more resilient to the impacts of climate change. This is possible thanks to adequate financial contributions from Technical and Financial Partners mobilised through financial mechanisms dedicated to the climate and in favour of LDCs and developing countries.

Since 2019, following the example of other countries that are parties to the United Nations Framework Convention on Climate Change, Niger has been revising and strengthening its NDC through the Climate Actions Enhancement Package (CAEP) initiative of the NDC Partnership. This revision is under the leadership of the ministry in charge of the environment. The latter is assisted in this task by the focal points of the AFAT and Energy sectors, research and training institutions and civil society organisations federated by the national committee for the revision and strengthening of the NDC.

The revision of the NDC aims to capitalise on the achievements of the first NDC and to make good the shortcomings thanks to the multi-faceted support of the NDC Partnership's member partners, who are currently funding studies on governance and the implementation of the NDC.

operational implementation of the CDN. The deliverables resulting from these studies have been validated by two

(2) bodies, namely the technical sub-committee and the National Committee responsible for revising and strengthening the NDC. The documents validated served as a basis for formulating the revised NDC, which will be submitted to the UNFCCC by the Government of Niger ahead of COP26 on Climate in November 2021 in Glasgow, Scotland.

Niger's strategy in this area is based on taking account of the climate dimension in its policies and strategies, as well as national development priorities such as the fight against poverty, food and nutrition insecurity, increased penetration of new and renewable energies, and energy efficiency.

In addition, Niger has opted to take account of migration, gender and social inclusion in its policies, strategies and NDCs, as well as the African Climate Initiatives, including the one relating to Security, Stability and Sustainability (3S).

The private sector in Niger is also committed to making investments to achieve the objectives of the UNFCCC and the Paris Agreement through the effective implementation of Corporate Social Responsibility (CSR) and the SDDCI-Niger Vision 2035. To this end, the private sector is opting to build the capacity of its members in CC and climate finance, promote and disseminate innovative technologies for climate action and work to mobilise and access climate finance.

Lastly, the CDN is aligned with the common African option of negotiations on climate and funding of transnational programmes structuring the resilience of populations and ecosystems (Climate Commission for the Sahel Region -17 member countries).

SUMMARY OF THE CDN

National circumstances	Population: 23.3 million (80% rural, 20% urban), (INS, 2019). Population growth rate: 3.9% (<i>RGPH/2011</i>). Low GDP of USD 12.9 billion in 2018, i.e. USD 553.65/capita, Economic growth: +7.2%, (<i>World Bank, 2018</i>). The agricultural sector provides 80% of the population's income. The agricultural sector is highly dependent on the vagaries of Niger's climate. The livestock population is estimated at 52,693,034 head, all species combined, or 20,876,240 LU (<i>DS/MAGEL2020</i>). Agriculture is the main sector of activity (69% of men and 31% of women) 36% of women own at least one plot of land (compared with 55% for men) (<i>UN Women, 2017</i>). CCs will lead to a change in the area of rainfed crops, a 9-15% drop in grain yields of non-photoperiodic millet, an 18-23% drop in grain yields of sorghum, a 21-25% increase in grain yields of photoperiodic millet, and a 17-18% increase in grain yields of maize (<i>Lona et al., 2019 in SPN2A, 2020</i>).
Loss and damage :	Average losses due to drought: over USD 70 million (<i>World Bank. Climate risk assessment, Niger, 2012</i>). Flood damage over the period 1990-2020 estimated at 3,115,290 people and 7,100 localities affected, with more than 225,000 homes. destroyed and losses of around 205,000 hectares of crops and 46,540 UBT (SAP, 2021).
Overall objective	Niger has set itself the objective of contributing to the reduction of global greenhouse gas emissions (target of 2°C or 1.5° C by 2050) while pursuing low-carbon socio-economic development that is resilient to the harmful effects of climate change.
National objectives :	 Combating poverty; Ensuring food and nutritional security for the people of Niger; To promote the sustainable management of natural resources and the widespread use of renewable energies; Strengthening the resilience of ecosystems and communities.
Emissions for the reference year:	28,777.299 GgCO2eq (QCN-2014) of which the AFAT Sector with 23,952.674 $_{\rm GgCO2eq}$ (88.30%), Energy with 3,833,789 $_{\rm GgCO2eq}$ (9.30%), Waste with 945,758 $_{\rm GgCO2eq}$ (2.29%) and Industrial Processes and Product Use (IPUP) with 45,078 $_{\rm GgCO2eq}$ (0.11%).

Coverage and scope of the contribution:

- 100% of the territory covered by the CDN.
- Gases covered: CO2, CH4, N2O. (88.7% of gases emitted).
- AFAT sector: 88.30% of total GHG emissions;
- Energy sector: 9.30% of total GHG emissions.

Contribution:

- Contribution based on a mixed 'Results and Actions' approach, unconditional and conditional according to the BAU reference scenario.
- Results approach: rate of emissions reduction compared with BAU, 2025 and BAU, 2030.
- Actions approach: actions of the SPN2A 2020-2035; of the CS-GDT-2014-2029.

Period: 2021-2030

- BAU: 2025 and 2030, based on emissions from the 2014 QCN (28777._{299GgCO2eq}), also taking into account the history of the three previous National Communications: CNI-1990, 9,000 GgCO2eq; SCN-2000, 30,_{801GgCO2eq}; TCN-2008, 35,900. GgCO2eq; 2020: 66,_{821GgCO2eq}; 2030: 96,_{468GgCO2eq}.
- Implementation period: 2021-2030.

Reducing GHG emissions by 2030:

AFAT

- Unconditional reductions: 4.50% (BAU 2025) and 12.57% (BAU 2030).
- Conditional reductions: 14.60% (BAU-2025) and 22.75% (BAU 2030)

ENERGY

- Unconditional reductions: 11.20% (BAU-2025) and 10.60% (BAU-2030)
- Conditional reductions: 48% (BAU-2025) and 45% (BAU-2030).

Measures to mitigate GHG emissions by 2030:

AFAT (Agriculture, Forestry and Other Land Uses):

- Scaling up best practices and SLM/C techniques and AIC throughout agro-ecological zones to increase the resilience of ecosystems and households, and sequester carbon in soils and trees.
- Sustainable forest management to reduce GHG emissions from deforestation.

Energy:

- 60% increase in the rate of access to electricity by 2030.
- Achieve 100% efficient network lighting by 2030.
- 100% efficient off-grid lighting by 2030.
- To achieve 100% use of low-energy light bulbs by 2030.
- To achieve 100% public lighting by 2030.

- Reduce per capita demand for wood energy by mass distribution of improved stoves, with a penetration rate of 100% in urban areas and 30% in rural areas;
- Promotion of domestic gas, biogas and biofuels on an industrial and household scale;
- Butane gas penetration of 60% in urban areas and 10% in rural areas by 2030 (PANER).
- Distribution of multifunctional platforms.
- To achieve 402MWp of renewable energy generation by 2030.
- Reach 100MW of off-grid capacity by 2030.
- Improving energy efficiency in industry, households, transport and electricity distribution.

Method of use:

- Strengthening the institutional, technical and financial capacities of stakeholders, and technology transfer.
- Development of 'bankable' structuring projects/programmes resulting from the CIP-CDN.
- Inclusive participation (private sector, NGOs, civil society, TFPs).
- Popularisation, communication, knowledge management.

Assumptions and methodology:

- Fourth National Communication (QCN),
- 2006 IPCC guidelines for national GHG inventories.
- Energy sector: GACMO, MAED, MESSAGE software.
- AFAT sector: EX-ACT software

Measures to adapt to climate change

- Assisted natural regeneration: 913,932 ha.
- Fixation of living dunes: 10,053 ha.
- Rehabilitation of degraded classified forests: 10,000 ha.
- Wetlands: 145,000 km
- Multi-purpose species plantations: 750,000 ha.
- Private forestry: 75,000 ha.
- One village, one wood" programme: 12,500 ha.
- Restoration of degraded pastoral land: 112,500 ha
- Development and securing of pastoral enclaves, grazing areas and rest areas: 455.848 ha.
- Development and marking of corridors: 279,702 ha.
- Development and securing of pastoral enclaves, grazing areas and rest areas: 455,848 ha.
- Improving livestock systems based on cattle and sheep fattening: 4,500 farms.
- Development of dairy farms (permanent housing): 258 farms.
- Land development for irrigated or flood crops :

Financing requirements over 10 years, for the period 2021-... 2030:

424,000 ha.

Total cost of the NDC over 10 years: **USD 9.9077 billion** (USD 990.77 million/year), including:

- Adaptation: USD 6.743 billion, of which USD 2.40 billion unconditional (36%) and USD 4.343 billion conditional (64%)
- Mitigation: USD 3.1651 billion, of which USD 0.2127 billion unconditional (6.72%) and USD 2.9524 billion conditional (93.28%).

Ambitious and fair:

- Niger is not included in Annex I of the Convention, and therefore has no quantified GHG reduction targets (mitigation).
- However, Niger is contributing to reducing the impact of climate change on a global scale, through a dual 'Results/Actions' approach.
- Emissions of 28,777.299 GgCO2eq in 2014 (reference year of the QCN) represent 1.61 t/capita and 0.0001% of global co2 emissions. Despite its significant needs to develop its economy and combat poverty, Niger aims to limit its GHG emissions by 2030 through the implementation of this NDC. Niger relies on mechanisms and resources such as the CIF and other climate finance mechanisms (CVF, AF, GEF, SCCF, CTF, SGP/GEF, LDCF) for LDCs and flexible access to their resources.

I. BACKGROUND

Niger is a country in West Africa with particularly harsh climatic conditions, as 2/3 of its surface area (1,267,000 km²) is located in the Saharan zone and 1/3 in the Sudanian and Sahelian zones. It is dependent on climatic hazards, with significant inter-annual, spatial and temporal variability in rainfall. Its population was estimated at 17.7 million in 2015, with a demographic growth rate of 3.9%/year (INS, 2015) and 23.3 million in 2019, most of whom derive their income from the exploitation of natural resources (MP, 2020a). In 2019, 51.6% of the population will be under the age of 15. The total fertility rate, which reflects the average number of children born alive per woman (aged 15-49), was 7.6 for the same year.

GDP is low (USD 12.9 billion in 2018), i.e. USD 553.65/capita and economic growth of +7.2%, [World Bank, 2018]. This GDP was USD 6.3 billion in 2015, or USD 413/capita, with an HDI of 0.374 (UNDP, 2016). Primary sector production is dominated by the agro-sylvo-pastoral sector with 37% of GDP and 80% of jobs (INS, 2018) varies greatly from year to year.

Like other West African countries, Niger is highly vulnerable to climate change, characterised by high climate variability and rainfall that leads to recurrent rainfall deficits. These deficits result in repetitive and cyclical droughts that are extremely harmful. For decades, the phenomena of desertification and the degradation of natural resources and land have been a major concern for the country's economic and social development. Faced with this situation, the State continues to develop initiatives and take action to preserve the sustainability of productive bases, as well as appropriate mitigation and adaptation strategies.

These disruptions caused by climate variability and change are considerably increasing food and nutrition insecurity, causing migration and the rural exodus of populations, conflicts between rural producers over the management of and access to natural resources, disrupting watercourse regimes and the availability of water resources, reducing crop yields and production, increasing the persistence of land disputes, accentuating the intensity of climate-sensitive diseases, increasing land degradation, and so on.

Niger has submitted three NCs for the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Climate Agreement. The fourth submission is currently being finalised.

1. Emissions trends

The four national communications (CNI-1990, SCN-2000, TCN-2008 and QCN-2014) show a trend towards an increase in national GHG emissions, particularly in the two priority sectors, while maintaining the same proportion.

Greenhouse gas (GHG) emissions are summarised in the table below for the national communications (CNI-1990, SCN-2000 and TCN-2008, QCN-2014).

Table 1: Breakdown of emissions by sector according to the National Communications

Year/Annual emissions	Energy	Agriculture / Breeding	UTCATF	Industrial processes	Waste	Total (_{GgCO2eq})
CNI-1990	928,47	1 839,55	6 106,26	9,56	28,22	9 000
SCN-2000	2 622	10 656	17 132	18	373	30 801
TCN-2008	1 766	12 675	21 010	34	415	35 900
QCN-2014	3 833,789	23 952	2,674	45,078	945,758	28777,299

Sources: (CNEDD, 2020)

The results of the GHG inventory for the QCN (base year 2014) established aggregate emissions/absorptions for the direct gases $_{\text{CO2}}$: -8,192.006GgCO2eq; $_{\text{CH4}}$: 1,585.35 $_{\text{GgCO2eq}}$ and N2O: 19,384.006 $_{\text{GgCO2eq}}$. $_{\text{CO2}}$ emissions $_{\text{a r e}}$ estimated at 2,217.741 GgCO2eq compared with an absorption of -10,434.735 $_{\text{GgCO2eq}}$, giving a $_{\text{CO2}}$ sequestration capacity of the order of -8,192.006 $_{\text{GgCO2eq}}$. Hence, overall emissions/absorptions of the main direct gases ($_{\text{CO2}}$, $_{\text{CH4}}$, $_{\text{N2O}}$) estimated at 28,777.299 $_{\text{GgCO2eq}}$.

By way of example, for the reference year 2014, the breakdown of emissions between the different sectors is presented as follows:

Table 2: Breakdown of emissions by sector according to the Fourth National Communication (2014)

Reference year (2014)	Emissions (GgCO2eq)	Share of emissions (%)
AFAT	23 952,674	88,30
Energy	3 833,789	9,30
Waste	945,758	2,29
Industrial Processes and Product Use	45,078	0,11

Sources: (CNEDD, 2020)

2. Climate trends and associated risks

Niger's climate is tropical and semi-arid, with two seasons: a dry season from October to May and a rainy season from June to September.

During the dry season, the average temperature varies between 18.1 and 33.1°C. The temperature records observed are - 2.4°C (observed on 13 January 1995 in Bilma) for minimum temperatures and 49.5°C (observed on 7 September 1978 in Diffa) for maximum temperatures (PANA, Niger 2006).

During the rainy season, the average temperature varies between 28.1 and 31.7°C. The rainfall pattern is unimodal, with maximum rainfall around August. In a normal year, rainfall allows groundwater to be recharged, water bodies to form and plant cover to develop.

Since the 1950s, Niger's climate has undergone 3 distinct rainfall cycles, common to the Sahel as a whole:

- Between the 1950s and 1970s, Niger enjoyed a cycle of wet years;
- Between the 1970s and 1990s, Niger experienced a cycle of major droughts, with particularly dry spells in 1970 and 1984, as in the rest of the Sahel;
- From the early 1990s, much better rainfall conditions returned to the region (Ali et al., 2008, 2010), albeit with an increase in interannual rainfall variability.

In view of this situation, Niger is faced with extreme climatic hazards that are becoming more frequent and violent (recurrent and successive droughts, floods, violent winds, extreme temperatures and sand or dust storms, etc.); The persistence of other indirect factors such as epidemics (meningitis, cholera), crop pests (caterpillars, flower-feeding insects, aphids, granivorous birds), livestock diseases (epizootics), bush fires, and so on.

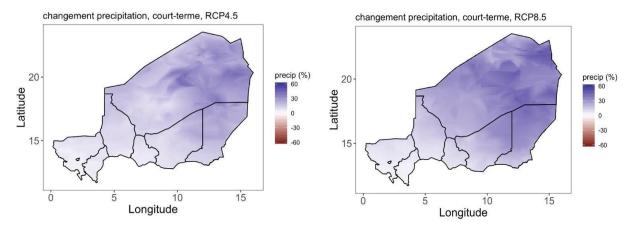
3. Precipitation trends

Figure 1 below shows the simulated evolution of average rainfall accumulations during the rainy season (JJAS) over the short term (top) and medium term (bottom), for the RCP4.5 (left) and RCP 8.5 (right) scenarios.

The models forecast a general upward trend in cumulative rainfall during the rainy season (JJAS) compared with the 1981-2010 climatological baseline.

These conclusions are consistent with trends obtained by various authors.

According to the models, the increase in rainfall should be greater in the north and east of the country. The increase in rainfall is expected to be greater in the medium term than in the short term, and greater the more pessimistic the greenhouse gas increase scenario (RCP 8.5 compared with RCP 4.5).



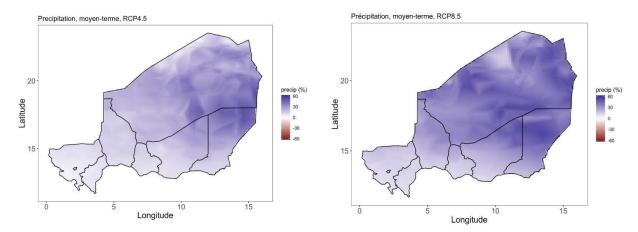


Figure 1: Simulation of changes in average rainfall totals during the rainy season (JJAS) for the short and medium term, compared with the 1981-2010 reference period. These results are the median of simulations carried out with 29 global models from the Global Model Intercomparison Experiment (CMIP5) for the RCP 4.5 and RCP

8.5. The values shown correspond to the percentage variation in relation to the reference cumulative rainfall.

Source: MESUDD, 2020

4. Temperature trends

Figure 2 below shows the simulated change in temperatures during the rainy season (JJAS) over the short term (top) and medium term (bottom) for the RCP 4.5 (left) and RCP 8.5 (right) scenarios.

The models predict temperature rises during the rainy season (JJAS) in all localities in Niger of around 1°C in the short term (to 2030), compared with 1.5 to 3°C in the medium term (to 2050).

The projected rise in average temperatures is significantly greater in the RCP 8.5 scenario than in the RCP 4.5 scenario, which is logical.

The models indicate slightly greater increases in mean surface temperatures in the northernmost regions, compared with the south and west of Niger.

The conclusions reached are consistent with trends already identified by several authors.

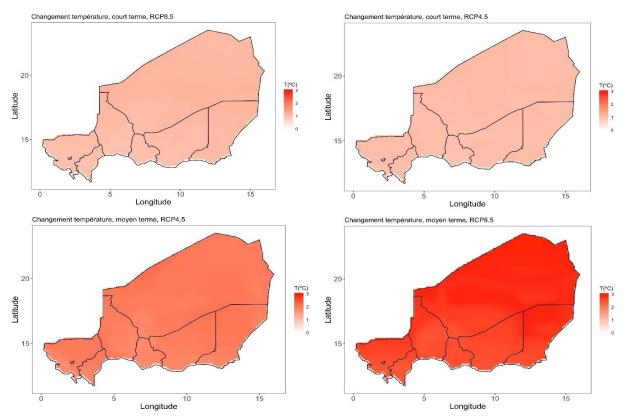


Figure 2: Differences in mean surface temperatures in Niger during the rainy season (JJAS), simulated over the short and medium term compared with the 1981-2010 reference period. These results are the median of the simulations carried out with 29 global models from the global model intercomparison experiment (CMIP5) for the scenarios RCP 4.5 and RCP 8.5.

Source: MESUDD, 2020

The models tend to show a downward trend in the number of rainy days during the JJAS period over Niger as a whole. The decrease in the number of rainy days is greater in the medium term than in the short term, but similar between the RCP 4.5 and 8.5 scenarios.

In Niger, the combination of an increase in cumulative rainfall (Figure 2) and a decrease in the number of rainy days over the JJAS season (Figures 1) indicates a trend towards more intense rainfall and longer dry spells during the agricultural season.

5. Impacts and vulnerabilities

The national economy is essentially based on the agro-sylvo-pastoral and fisheries sector, which remains the main source of employment and income for more than 80% of the population. However, this sector remains dependent on the vagaries of the climate.

In terms of impact on agriculture, locust attacks and other crop pests damaged more than 1.6 million hectares. Hazards (drought, bush fires, floods) together account for more than 1 million hectares. More than 17 million head of livestock also perished during events between 2001 and 2014. In terms of economic impact, droughts and floods accounted for 96% of economic losses. The values

damage and losses caused to the agriculture and housing sectors exceed USD 3.2 billion (UNDP, 2017 in CNEDD, 2020).

Future climate change will lead to a 10-20% reduction in yields for most rainfed crops by 2050, compared with 2020 (MESUDD/SPN2A, 2020).

The most recent simulations show that by 2050, compared with average yields over the 1981-2010 period, CCs should lead to: a 9-15% drop in grain yields for non-photoperiodic millet; an 18-23% drop in grain yields for sorghum; a 21-25% increase in grain yields for photoperiodic millet; and a 17-18% increase in grain yields for maize (MESUDD/SPN2A, 2020).

All these extreme climatic events are an obstacle to achieving the objectives of the fight against poverty and for economic and social development as set out in the policies and strategies (SDDCI-2035, PDES, Initiative 3N, PNEDD-2016, SPN2A, etc.). This situation represents a major challenge.

6. Fairness and ambition

Niger's GHG emissions are 28,777.299 _{GgCO2eq} (QCN-2014) and only 0.0001% of global _{CO2} emissions. Niger is not included in Annex I of the UNFCCC, and therefore has no quantified mitigation obligations. However, despite its significant needs to develop its economy and the need to lift a large part of its population out of poverty, Niger's ambition is to limit its emissions to 1.61tCO2eq/capita by 2030, as part of the conditional target. The NDC is fair in terms of national capacities, population growth, Niger's geographical location and arid climate, and the degree of vulnerability of its economy, which depends on rainfall. The revision of the NDC puts Niger on a low-carbon development path to ensure the resilience of its populations, ecosystems, productive bases and development infrastructures.

Despite this period of the COVID-19 pandemic and decades of insecurity in the Sahara and Sahel and the displacement of populations, Niger is continuing to implement measures to adapt and combat the harmful effects of climate change. This situation is undermining the Government's efforts and slowing down socio-economic activities in the country.

II. ATTENUATION COMPONENT

Despite Niger's situation of vulnerability and its membership of the LDC group, the NDC provides for a reduction in GHG emissions during the period 2021-2030 in the two sectors (AFAT, Energy) according to the projected emissions for the BAU-2025 and BAU- 2030 and according to a reference scenario based on assumptions. The mitigation measures are divided into unconditional and conditional contributions.

Adaptation is essential for the country. In order to participate in the international community's mitigation efforts, Niger favours adaptation actions with strong co-benefits in favour of mitigation.

Mitigation in the energy sector requires major investment to facilitate access to cheap, sustainable and clean energy.

While mobilising its national resources, Niger wishes to use International Climate Finance and other international financial mechanisms and benefit from the support of international cooperation to achieve its objectives.

2.1. Reference scenario

2.1.1. AFAT sector

The BAU scenario for the AFAT sector was defined using the FAO's EX-ACT (EX-Ante Carbon-balance Tool), taking into account current development trends in the AFAT sector and future human activities.

The results show that without co-benefit adaptation measures, emissions, which were estimated at 24,000 ktCO2-eq in 2014, will rise to 69,434 ktCO2-eq in 2025 and 107,296 ktCO2-eq in 2030, as shown in Figure 3.

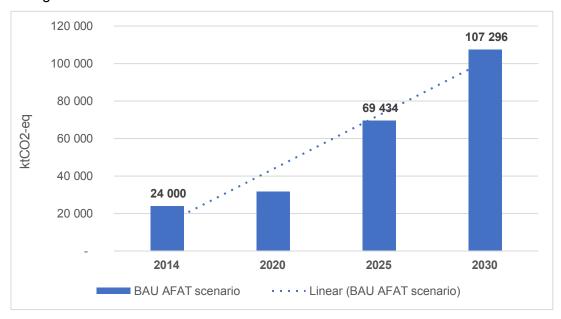


Figure 1: Emissions trends in the AFAT sector over the period 2014-2030

2.1.2. Energy sector

The BAU scenario was defined using *The Greenhouse Gas Abatement Cost Model* (GACMO), based on the energy balance for the reference year of the 2014 GHG inventory, population growth, GDP, energy demand in the various sectors of activity and emissions from the energy sector. The results of the BAU scenario over the period 2014-2030 show an upward trend in emissions. Indeed, the sector's $_{\text{CO2}}$ emissions, estimated at 2,146 $_{\text{ktCO2}}$ in 2014, will rise to 7,454 $_{\text{ktCO2}}$ in 2025 and 11,756 $_{\text{ktCO2}}$ in 2030. As Figure 4 shows, 'without mitigation measures', the sector's development trajectory would be a source of GHG emissions.

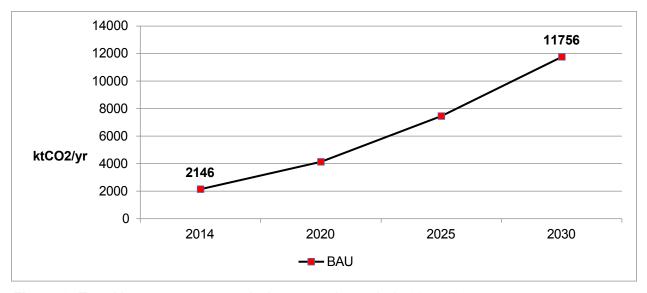


Figure 2: Trend in energy sector emissions over the period 2014-2030

2.2. Mitigation measures

2.2.1. AFAT sector

The technologies identified are co-benefit measures. Overall, their implementation is the subject of ongoing or planned projects/programmes. The following have been identified for the revised NDC: Planting of multi-purpose species: 750,000; Promotion of assisted natural regeneration (ANR): 913,932 ha; Development of land for irrigated or flood-recession crops: 424,000 ha; Quickset hedges and windbreaks: 145,000 km; Development and securing of pastoral enclaves, grazing areas and rest areas: 455,848 ha; Development and marking of passage corridors: 279,702 ha; Restoration of degraded pastoral land: 112,500 ha; Private forestry: 75,000 ha: Development of zero-grazing dairy farms (permanent stabling): 258 farms; Intensification of livestock systems based on cattle fattening: 1,500 farms; Intensification of livestock systems based on sheep fattening: 3,000 farms; "One village one wood" programme: 12,500 ha; Fixation of living dunes: 10,053 ha; Rehabilitation of degraded classified forests: 10,000 ha; Input management: 10,822 tonnes; Combating deforestation (land clearing) and bush fires (firebreaks): 7,500 ha; Fodder crops: 2,000 ha. Implemented over an area of 4,838,899.5 hectares.

ha (i.e. 4% of the country's surface area), these technologies will enable Niger to sequester **4.2** tonnes of $_{CO2-eq}$ / ha/year.

2.2.2. Energy sector

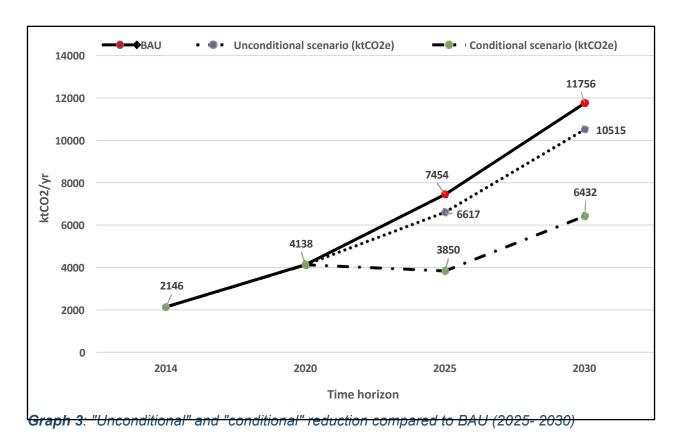
The unconditional and conditional mitigation options in the Energy sector concern the proportion of energy efficiency in the residential and tertiary sectors; the reduction of electricity transmission and distribution losses; the development of renewable energies and the improvement of energy efficiency in the transport sector. The targets selected are set out in Table 3.

Table 3: Unconditional and conditional mitigation measures and technologies in the energy sector

Mitigation measures	Technologies	Units	Conditional targets to 2030	Unconditional targets by 2030
Promoting energy efficiency in the	Efficient lighting with compact fluorescent bulbs	Lamps	841 000	250 000
residential and tertiary sectors	Efficient LED lighting	Lamps	295 000	88 000
lertiary sectors	Efficient wood fireplaces	Homes	942 000	300 000
	Efficient charcoal fireplaces	Homes	520 000	140 000
	LPG fireplaces	Homes	520 000	500 00
	Office lighting effective with compact fluorescent bulbs	Lamps	253 000	80 000
	Efficient LED office lighting	Lamps	310 000	90 000
	Efficient street lighting	Lamps	140 000	70 000
	Solar LED lamps	Lamps	71 000	40 000
	Efficient refrigerators	Refrigerators	283 000	113 000
	Efficient hotel refrigerators	Refrigerators	71 000	15 000
	Solar street lamps	Lamps	40 000	8 000
Reducing transmission	New high-efficiency coal- fired power station	MW	200	0
and distribution losses electricity	Efficient electricity networks (avoided losses)	GWh	52	0
Development of renewable	Hydroelectricity connected to the main grid	MW	130	0
energies	Electricity generation from bagasse	MW	12	0
	Solar PV, large grid	MWp	402	0
	Solar/diesel mini-grid	MWp	24	0
	Solar PV, small isolated grid, 100% solar	MWp	100	0

	Wind turbine	MW	50	0
Improving energy	More efficient petrol cars	Cars	0	8000
efficiency in the transport sector	More efficient diesel cars	Cars	0	5000
	Restrictions on imports of used cars	Cars	0	35 000

The impact of these measures on reducing emissions was assessed using the GACMO tool. The results show a significant reduction in emissions from the sector. Without the measures, emissions will rise to 11,766 $_{ktCO2}$ in 2030, while with the measures, emissions will fall to 6,432 $_{ktCO2}$, i.e. a reduction of 5,324 $_{ktCO2}$. Figure 5 below shows the impact of the reduction measures (Unconditional and Conditional) in relation to BAU-2025 and BAU-2030.



III. ADAPTATION COMPONENT

The assessment of the vulnerability of the AFAT and Energy sectors has made it possible to identify the following adaptation options: i) Promotion of climate-smart agriculture; ii) Use of meteorological data by producers; iii) Development of sustainable land and water management; iv) Strengthening of participatory and digitised forest management; v) Drawing up and implementing a ten-year reforestation plan; vi) Developing urban and peri-urban forestry; vii) Subsidising fossil fuel and solar energy kits; and viii) Developing Public-Private Partnerships (PPP) for the development of new and renewable energies.

1. Priority adaptation measures by sector

Adaptation measures in the AFAT sector focus on improving the resilience of the agriculture, livestock, forestry, water resources, fisheries and wildlife sub-sectors, as well as people's health. The emphasis is on promoting AIC techniques that take into account the use of climate information, early warning, risk and disaster management, gender and social inclusion, agricultural climate index insurance and the integration of the 'climate change' dimension into local, regional and national planning.

The planned mitigation measures in the AFAT sector relate to the scaling-up of good practices in sustainable land and water management (SLM) across all agro-ecological zones with a view to increasing the resilience of ecosystems and households, and sequestering carbon.

For the Energy sector, the measures aim to facilitate access to cheap, sustainable and clean energy, as well as access to modern energy services for all by 2030. The mitigation options concern management of the 'Residential' sub-sector (households), through rural electrification, saving wood energy and replacing it with other, more modern fuels (butane gas, biofuels, solar); the 'Transport' sub-sector by reducing its specific consumption; management of the 'Demand, Transformation and Extension of Renewable Energies' sectors by improving the energy efficiency of the sectors and promoting photovoltaic solar energy for water pumping, health and electrification.

Table 4 below shows the impacts and vulnerabilities in the AFAT sub-sectors and the adaptation measures to deal with these impacts.

Table 4: Impacts and adaptation measures in the AFAT sub-sectors

Sub-sectors	Impacts and vulnerabilities	Measures and actions
Agriculture	 Reducing rainwater resources An upsurge in crop pests (locusts, grasshoppers, leafminers, etc.). 	 Use of certified improved high- yield varieties and adapted plant genetic resources Integrated soil fertility management

- Reduction/loss of crop yields and production
- Disruption to the cropping calendar (preparation, sowing, maintenance work, harvesting, etc.)
- The silting up of farmland, the decline in agriculture's contribution to GDP
- Silting of oasis basins
- Local flooding of areas bordering bodies of water, resulting in crop losses, loss of agricultural production and stocks, damage to agricultural infrastructure and hydro-agricultural facilities.
- Increase in potential evapotranspiration
- Conflicts between rural producers
- Ecosystem degradation
- Increasing food and nutritional insecurity

- Agricultural index insurance
- Drip irrigation
- Promotion and development of irrigated crops
- Promotion and use of climate services and information for producers
- Creation of run-off water reservoirs and their use for irrigated crops (market gardening)
- Treatment of watersheds and koris that damage crop areas
- Creation of flood protection works for farming areas
- Controlling climate-sensitive crop pests and diseases
- Promoting small-scale irrigation and off-season crops through the use of improved, innovative and high-performance irrigation systems
- Organisation and development of value chains for the main cash crops with high added value
- Promoting agroforestry and ANR
- Improving marketing systems for local agricultural products to benefit vulnerable producers
- Reclaiming degraded land for agricultural and pastoral use
- Integrating adaptation to CC into municipal, departmental and regional development plans.

	T	
	- Reducing biodiversity	- Forest management
	- Degradation of forest ecosystems	
	- Disappearance of certain animal and plant species	- Recovery from degraded land
Forestry	 Proliferation of harmful terrestrial and aquatic species (water hyacinth, <i>Sida cordifolia</i>, Tipha autralis) Formation of gullies and/or sand dunes, soil pollution, crusting Wildlife migration Reduced productivity of forestry potential. 	
Breeding	 Changing the composition of herds by gradually replacing cattle with small ruminants and camels, which are more resistant to difficult climatic conditions. Converting nomadic herders into sedentary populations, General decline in forage potential Silting up of grazing areas Proliferation of certain plant species not eaten by animals (Sida cordifolia, Calotropis procera) Degradation of rangelands Increased mortality among livestock, especially cattle, due to recurrent droughts Falling income for livestock farmers Decline in the contribution of livestock farming to GDP. 	farming by strengthening pastoral developments and security capacities in the pastoral zone; Increasing livestock productivity by improving genetic potential and developing agriculture/livestock integration Support for village poultry farming Boosting the livestock and meat sector Support for the organisation of livestock industry professionals Support for the privatisation of the zoo/veterinary profession Combating epizootic diseases and setting up health surveillance systems

		livestock farming in Niger and accompanying measures. - Promotion of fodder crops
Water resources	 Flooding (torrential rain) Strong wind, sandy wind Extreme temperature Droughts. Pollution of surface and ground water Variations of piezometric levels Increasingly rapid drying up of watercourses 	 Improving knowledge and control of water resources Valuation of weather information Improving coverage of people's water needs and their living environment Construction of mini water supply systems in the most densely populated villages Support for all production sectors, while seeking a better balance between the costs of investment, maintenance and operation of water infrastructures. maintenance and operation of water infrastructures Clarification of and respect for the roles of the various partners (State, local authorities, private sector, beneficiary populations, etc.). Protecting water resources, water quality and aquatic ecosystems Installation of windbreaks to protect lakes and watercourses from wind erosion Making the most of water resources through better organisation of the sector Matching the supply of water for domestic, industrial and agricultural use Waste water treatment Adequacy between development and urbanisation.

(ME/LCD, 2021)

IV. IMPLEMENTATION OF THE CDN

1. Political, institutional and organisational framework

The cross-sectoral implementation of the NDC requires the mobilisation of state actors from sectoral ministries and research and training institutions, including public universities, the private sector and CSOs.

Implementing the NDC also requires a mode of governance that ensures the functions of guidance/decision-making, steering, consultation and implementation. This governance will be based on solid leadership, communication and exchange, as well as the involvement and support of the stakeholders involved. It is essential to create good institutional synergy and ownership of the process by all stakeholders.

The Permanent Secretariat (PS), the executive body for implementing the NDC, is responsible for coordination and has adequate qualified human and material resources and management autonomy. It will be specifically responsible for coordinating and monitoring the implementation of the NDC, with clearly defined missions and responsibilities to avoid any conflict of competence with other structures. The implementation of the NDC's activities will fall within the remit of the sectoral administrations concerned, the NGOs/ADs and the private sector.

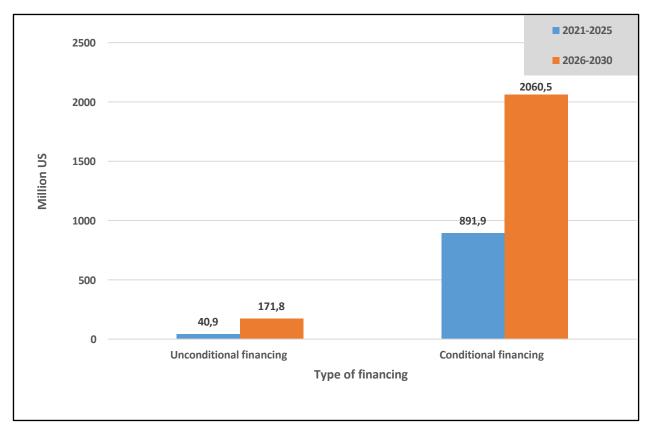
A steering committee will be set up to provide guidance to the PS in implementing the decisions. The NDC implementation monitoring committee, with its current membership (sectoral administrations, research and training, CSOs, private sector, TFPs), will continue to carry out its tasks.

2. Financing Mitigation

The overall amount (unconditional and conditional investment) for implementing the mitigation technologies identified is estimated at USD 3.1651 billion for the period 2021-2030 in two five-year phases.

The costs of unconditional and conditional options are estimated at USD 0.2127 billion or 6.72% and USD 2.9524 billion or 93.28% respectively.

These costs are summarised in Figure 6 and Table 5 below.



Graph 4: Financing flows by phase of implementation of the NDC in the energy sector

Table 5: Mitigation financing costs

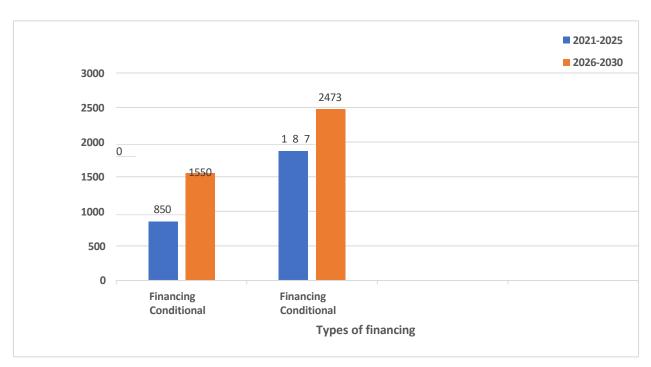
Energy	Discount		Financing (USD billions)	
	BAU 2025	BAU 2030	2021-2025	2026-2030
Unconditional	11,2%	10,6%	0,0409	0,1718
Conditional	48%	45%	0,8919	2,0605
Total financing			0,9328	2,2323

3. Financing Adaptation

The total cost (unconditional and conditional investment) of implementing the identified adaptation technologies is estimated at USD 6.743 billion for the period 2021-2030 in two five-year phases.

The costs of unconditional and conditional options are estimated at USD 2.40 billion (36%) and USD 4.343 billion (64%) respectively.

These costs are summarised in Figure 7 and Table 6 below.



Graph 5: Flow of funding by NDC implementation phase in the AFAT sector

Table 6: Cost of financing adaptation

AFAT	Disc	Discount		Financing (USD billions)	
	BAU 2025	BAU 2030	2021-2025	2026-2030	
Unconditional scenario	4,5%	12,57%	0,85	1,55	
Conditional scenario	14,6%	22,75%	1,87	2,473	
Total financing			2,72	4,023	

4. NDC monitoring, reporting and auditing

A monitoring and evaluation system for the NDC has been set up to track performance indicators and Niger's adaptation and mitigation efforts as part of the implementation of the Paris Agreement. Regular monitoring and annual assessments will be carried out to make any necessary adjustments, taking into account relevant and objectively verifiable indicators. Monitoring and evaluation will be carried out by a Permanent Secretariat housed at the ME/LCD and will be carried out in a participatory manner with all the representatives of the steering body responsible for implementing the NDC. Monitoring and evaluation will cover both physical and financial achievements.

The NDC's monitoring and evaluation mechanism provides for two types of monitoring: implementation monitoring, which will use data from the activity reports of national structures and partners, and the preparation of activity reports by the Permanent Secretariat; and impact monitoring, which will be based on performance indicators at two levels (national and local) and in both internal and external forms.

In addition, the MRV (Measurable, Reportable and Verifiable) system constitutes a "vector of confidence between countries, by transparently exposing their mitigation actions as well as the financing obligations of developed countries". Once the MRV system has been developed and adopted by Niger, it will be important to build the capacity of the key players involved in implementing the UNFCCC.

VI. THE CDN'S CLIMATE GOVERNANCE REQUIREMENTS

Niger's financial needs for the implementation of the NDC over the period 2021-2030 are USD 9.9081 billion, of which USD 2.6127 billion (unconditional scenario), or 26.37%, is supported by the State, and USD 7.2954 billion (conditional scenario), or 73.63%, is to be mobilised from TFPs and international climate finance.

Through its policies and strategies, the NDC contributes to the achievement of the SDGs and to Niger's economic and social development objective. This objective will be achieved by taking into account or implementing the main elements of the various support action plans and climate governance tools of the CDN during its period. These are:

- Capacity building for stakeholders and institutions implementing the NDC;
- Pre-feasibility/feasibility studies and development of projects and programmes in the energy sector;
- Development of project/programme documents;
- Ownership of the Partnership Plan (PP) by the partners;
- Development of Public Private Partnerships (PPP) for new and renewable energy projects;
- Development of concept notes for mitigation and adaptation projects/programmes;
- Development of CDN's Climate Investment Plan;
- Transfer of appropriate technologies;
- Finalisation of the NDC monitoring and evaluation system;
- Registration system and MNV procedures;
- Establishment of NDC governance bodies (implementation, steering and orientation, monitoring, etc.);
- Setting up a Climate Change Communication Strategy;
- Adoption of the NDC Implementation Roadmap;
- Organisation of national data and information collection structures, and mobilisation of the resources needed to conduct a GHG inventory, store data, archive and build a database. The IGES will take into account new gases used in Niger with a high GWP, in compliance with Niger's commitments under other Multilateral Environmental Agreements.

1. National MRV system

The national MRV (Measurement, Reporting and Verification) system is vital for measuring progress in implementing the NDC, particularly for mitigation measures. The MRV system will demonstrate Niger's willingness to work transparently with its partners.

2. Technology transfer

Priority technology transfer needs have been identified as part of the project

A "Technology Needs Assessment (TNA)" and a portfolio of projects and programmes have been identified to deal with the harmful effects of CC through the transfer of and access to clean technologies. Technology transfer concerns both adaptation and mitigation.

3. Mobilising financial resources

Niger is relying on international cooperation to mobilise sufficient financial resources to achieve the objectives of the NDC. The resources that can be mobilised at national level are limited and insufficient, hence Niger's keen interest in accessing climate funds. It is therefore important to build the capacity of stakeholders to facilitate access to financial mechanisms and resources to promote the implementation of the NDC. The strategy for mobilising resources will focus on the following areas: strengthening the existing partnership network, designing decision-making tools, developing advocacy actions, diversifying sources of funding and making the most of funding opportunities.

The Climate Investment Plan for the implementation of the NDC will concern all adaptation and mitigation projects/programmes identified or decided by the project owners and the Government.

In addition, there is a need to raise stakeholders' awareness of the challenges of the NDC at all levels, and to identify and mobilise sources of financial mechanisms to meet the challenges of implementing the NDC and promoting Niger's economic and social development. The following sources of funding could already be mobilised: the Green Climate Fund, the Adaptation Fund for LDCs, the Strategic Climate Funds (SCF), the Adaptation Programme Funds for Small Farmers, the GEF's Small Grants Programme (SGP), the Clean Technology Trust Funds, and so on.

Climate governance in Niger is also marked by the political will to implement the Paris Agreement, to strengthen local governance, to integrate gender and inclusion, to integrate CC issues into national policies and strategies, and to implement the Climate Investment Plan for the Sahel Region and its Priority Programme to Catalyse Climate Investments in the Sahel.

Lastly, the commitments announced by partners to finance the NDC open up prospects for mobilising funding and developing bankable development projects for Niger, the Sahel region and the ECOWAS zone.

VII. OTHER INFORMATION

Niger has embarked on a process of developing concept notes and pre-feasibility/feasibility and cost-benefit studies for projects and programmes in the fields of agriculture, the environment, water resources, energy, health, transport and equipment, livestock farming, sustainable development, etc. These initiatives will be submitted to international climate financing mechanisms, including the Green Climate Fund (GCF). These initiatives will be submitted to international climate financing mechanisms, including the Green Climate Fund (GCF).

These projects and programmes come under the two priority sectors AFAT and Energy and are included in the Partnership Plan and the Climate Investment Plan of the NDC for which financial resources must be mobilised as part of the operationalisation of the NDC. Some projects are already financed by the CVF for the coming years.

AFAT sector projects concern the sustainable management of natural resources (land, forests, pasture, water). The projects in the Energy sector are those in the Roadmap for the electricity sub-sector to 2035, including the power stations decided or planned by the Government and the new other options to be selected by the model.

All these projects and programmes contribute to both adaptation and mitigation to ensure the resilience of communities and ecosystems.

VIII. CONCLUSION

The revision and submission of the NDC before COP-26 in Glasgow reflects the willingness of the Government of Niger to honour its commitments under the Convention and the Paris Agreement with a view to contributing to the reduction of the global temperature increase to 2°C or even 1.5°C.

This update of GHG mitigation and CC adaptation targets and measures, as well as funding for priority sectors (AFAT, Energy) are determined for the period 2021-2030 to enable all national parties to prepare for human, institutional and logistical capacity building actions and to reassess all investment projects and programmes. This update took into account the revised NDC's climate governance tools, including the implementation roadmap, the resource mobilisation strategy, the MRV system, the monitoring and evaluation system, the communication and CC strategy, the NDC's climate investment plan and the creation of the national GHG inventory database.

The proposed new objectives are in line with Niger's strategic and policy frameworks: SDDCI-Niger 2035, PDES, I3N, SPN2A, DPNE, SNPA/CVC, PNCC, PNEDD-2016, SNT, etc.

Implementing the mitigation and adaptation technologies identified in the Energy and AFAT sectors respectively will contribute to achieving these new objectives for the period 2021-2030 and will require a total investment of USD 9.9081 billion, of which USD 2.6127 billion (Unconditional scenario) or 26.37% will be supported by the State, and USD 7.2954 billion (Conditional scenario) or 73.63% will be mobilised from TFPs and International Climate Finance.

Through the implementation of the Contribution, Niger will contribute to achieving the Paris Agreement's objective of "stepping up the global response to the threat of climate change by keeping the increase in global temperature well below 2°C, and to make even greater efforts to limit this increase to 1.5°C above pre-industrial levels".

The revision of the NDC is also an opportunity to step up the mobilisation of partners and resources for the implementation of the Roadmap and the Climate Investment Plan in order to finance investment projects and programmes to reverse the trend of climate disruption on the one hand, and to enable Niger's valiant people and ecosystems to become more climate resilient on the other.

In addition, Niger has taken account of the gender dimension and inclusion and fully involved the private sector in the entire process of reviewing, planning and implementing the Contribution.

References

ME/LCD, Action Plan and Roadmap for the AFAT Sector, June 2021

ME/LCD, Final report: "Development of GHG emission mini-inventories and projections to support the preparation of new targets", Activity A-575, CAEP-IRENA, 2021

ME/LCD, Final report: "Reinforcement of the mechanism for monitoring the implementation of NDCs", Activity A-591CAEP-IRENA, July 2021

ME/LCD, Vulnerability assessment of the agriculture, forestry and other land use (AFOLU) and energy sectors, June 2021

ME/LCD, Update of the objectives of the Nationally Determined Contribution (NDC) and its alignment with new sectoral and national policies, June 2021

ME/LCD, Final report: Evaluation of institutional capacities to review and implement the Nationally Determined Contribution (NDC), June 2021

ME/LCD, Final report: Cost-benefit analysis to inform the selection of energy projects for inclusion in the revised NDC (Activity A586), August 2021

ME/LCD, Rapport sur l'État des lieux de la mise en œuvre de la Contribution Déterminée au niveau National (CDN) du Niger, May 2021

ME/LCD, Investment Plan for the implementation of Niger's Nationally Determined Contribution (NDC) - interim version, July 2021

ME/LCD, Rapport intermédiaire : Appui à la collecte des données pour améliorer l'inventaire des Gaz à Effet de Serre de la République du Niger dans le cadre du Climate Action Enhancement Package du NDC Partnership - Objectif 1 - Analyse les sources d'émissions de gaz fluorés et identifier les structures et les données disponibles à cet effet, December 2020.

MESUDD, Appui à la collecte des données pour améliorer l'inventaire des Gaz à Effet de Serre de la République du Niger dans le cadre du Climate Action Enhancement Package du NDC Partnership - Objectif 3 : Système MNV national des émissions permettant de suivre l'atténuation du secteur de l'énergie, December 2020

MESUDD, Stratégie et Plan National d'Adaptation face au changements climatiques dans le secteur Agricole SPN2A, 2020

ME/LCD, Revised NDC Cross-Sectoral Implementation Strategy, August 2021

MESUDD, Document de Contribution Déterminée au niveau National (CDN) du Niger, September 2015

World Bank-Niger: Rapid Situational Assessment, Interim version 10/02/2021

Ministry of Energy, National Electricity Policy Document (DPNE)

Ministry of Energy, National Electricity Access Strategy (SNAE)

ME/LCD, Niger's Interim Report on the Support Mechanism for the Development of CPDN/UNFCCC, September 2015

ME/LCD, Report on the Alignment of private sector initiatives with the new climate objectives and targets of the UNFCCC, (IRD ex-ORSTOM), August 2021

ME/LCD, final report on the implementation of a national monitoring and evaluation system for the implementation of the NDC, mitigation component (MRV) - Activity C061, August 2021

ME/LCD, OIM, Rapport des résultats préliminaires de la recherche de l'Étude nationale sur le lien entre migration, environnement et le changement climatique, sensible au genre au Niger, August 2021

ME/LCD, Study for the integration of the gender dimension and green jobs in the revised CDN, October 2021

République du Niger : Elaboration de projections climatiques désagrégées pour le Niger, Livrable N°1 - Version finale (SNP2A) du 01/11/2019