

Macedonian Second Biennial Update Report on Climate Change

National climate change perspectives after Paris

*National requirements and synergies in climate change reporting towards
UNFCCC and EU*

Final version

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Introduction

The year 2015 was a significant turning point for both the sustainable development and climate agendas. Two major international processes were concluded: the adoption of the Sustainable Development Goals (SDGs) by the United Nations General Assembly (UNGA) as part of the 2030 Agenda for Sustainable Development, and the adoption of a new international climate agreement, the Paris Agreement, under the United Nations Framework Convention on Climate Change (UNFCCC).

The main goal of this report is to present the achievements of these international processes and the corresponding Macedonian contributions and to discuss the climate change reporting requirements at national level taking into account the Macedonian status of a candidate country for EU membership (EU candidate).

Paris Agreement

In a nutshell

The Paris Agreement is underpinned by 162 intended nationally determined contributions (INDCs) that reflect the national climate policies and actions of 189 countries. Once countries formally join the Paris Agreement, their “INDCs” will be considered “NDCs” for the purpose of the Paris Agreement. The Agreement provides a broad foundation for meaningful progress on climate change, and represents a dramatic departure from the Kyoto Protocol and the past 20 years of climate negotiations. Indeed, covering close to 100% of global emissions is in significant contrast to the Kyoto Protocol, which now covers countries (Europe and New Zealand) accounting for no more than 14% of global emissions (and 0% of global emissions growth).

The main highlights are the following:

- Article 2 of the Agreement reaffirms the goal of limiting the global average temperature increase above the pre-industrial level to 2 degrees C, and adds 1.5 degrees C as something even more aspirational.
- Article 3 makes it clear that the INDC structure is central and universal for ALL parties, although Article 4 introduces references to the circumstances of developing country Parties.
- Article 4 importantly describes transparency requirements (domestic monitoring, reporting, and verification). This is crucial, and represents a striking compromise between the U.S. and Europe, on the one hand, and China and India, on the other hand. All countries must eventually face the same monitoring and reporting requirements, regardless of their status as developed or developing.
- Article 6 provides for international policy linkage, not only international carbon markets, but international linkage of other national policy instruments.
- Article 9 discusses “finance”, but the numbers do not appear in the Agreement, only in the accompanying Decision, where item 54 states that by 2025, the Parties will revisit the total quantity of funding, using the current \$100 billion target as a “floor.”
- Article 8 on Loss and Damage was necessary from the point of view of the most vulnerable countries, but the most contentious issue is settled in Decision 52, where the Parties agree that this “does not involve or provide a basis for any liability of compensation.”

- Article 14 includes five-year periods for the submission of revised INDCs (and global stocktaking of the impact of the Paris Agreement) are included in The first stocktaking review will be in 2018, with the start date for new INDCs set for 2020.

109 Parties of 197 Parties to the Convention have ratified the Paris Agreement (as of 13 November 2016¹). On 5 October 2016, the threshold for entry into force of the Paris Agreement was achieved (at least 55 Parties to the Convention accounting in total for at least an estimated 55 per cent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession) **The Paris Agreement entered into force on 4 November 2016**. The first session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA1) is taking place in Marrakech in conjunction with Conference of Parties 22 (COP 22) and Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 12).

Macedonian INDC

The Republic of Macedonia, intends to give the following contribution to the global efforts for GHG emissions reduction (Macedonian INDC):

To reduce the CO₂ emissions from fossil fuels combustion for 30%, that is, for 36% at a higher level of ambition, by 2030 compared to the business as usual (BAU) scenario. The CO₂ emissions from fossil fuels combustion cover almost 80% of the total GHG emissions in the country with a dominant share of the following sectors: energy supply, buildings and transport.

Due to the extensive use of fossil fuels, particularly the dominant share of domestic lignite for electricity production, there is a significant potential in the country for GHG emissions reduction. Having this in mind, the focus of the Macedonian INDC is put on climate change mitigation, that is, on policies and measures which lead to GHG emissions reduction. However, this does not suggest that adaptation is less important. Vulnerable sectors and climate change adaptation shall be subject to a more detailed analysis in the future, from the point of view of INDC needs.

The process for determining the Macedonian INDC was led by the MOEPP. The National Climate Change Committee (NCCC) and the Technical Working Group at the National Sustainable Development Council were also part of this process, as well as other key stakeholders – the Ministry of Economy and the Ministry of Transport and Communication as institutions which are responsible for policies in the target sectors, representatives of the business community, civil society organizations and the academic community. Also, the international institutions and donors in the country had important role, primarily UNDP and GIZ which provided technical and financial support for this process. The analysis and the technical component of the process were carried out by an expert team which included the team of the Research Center for Energy and Sustainable Development of the Macedonian Academy of Sciences and Arts, one national expert and one international expert.

Therefore, when identifying the specific mitigation policies and measures, the following documents have been taken into consideration

- Energy Strategy
- Energy Efficiency Strategy
- Strategy on Renewable Energy Sources
- The Program for Implementation of the Energy Strategy
- Energy Efficiency Action Plan

¹ http://unfccc.int/paris_agreement/items/9444.php

- Action Plan on Renewable Energy Sources
- Transport Sector Strategy
- Pre-accession Economic Program
- Program of the Government of the Republic of Macedonia
- The Third National Communication on Climate Change
- First Biennial Update Report on Climate Change

Consultations took place at technical meetings (with senior representatives of line ministries and appointed contact persons) and at topical workshops with all stakeholders. Workshops were held on the following topics:

- Identification and validation of possible mitigation policies and measures in the target sectors in agreement with the sector policies and planning documents, as well as with the European Policy on Climate and Energy.
- Discussion about and validation of the assumptions used for the modelling of the identified policies and measures in line with the sector policies and planning documents as well as with the European Policy on Climate and Energy.
- Prioritization of identified measures and providing directions for development of mitigation scenarios with existing and with additional measures.

Hence, the mitigation policies and measures underlying the Macedonian INDC include:

Energy supply

1. Reducing distribution losses
2. Large hydro power plants
3. Small hydro power plants
4. Solar power plants
5. Wind power plants
6. Biogas power plants
7. Cogeneration biomass power plants
8. Central heating in Bitola
9. Solar thermal collectors
10. Biofuels 5%

Buildings

11. Labeling of appliances
12. Public awareness campaigns, Energy Efficiency info centers
13. Refurbishment of buildings (in line with the Rulebook on Energy Performance of Buildings and Directive 2010/31/EU)
14. Construction of new buildings (in line with the Rulebook on Energy Performance of Buildings and Directive 2010/31/EU)

Transport

15. Increased use of railway
16. Renewal of the vehicle fleet
17. Increased use of bicycles, walking and introduction of a parking policy

The higher ambition mitigation scenario includes additionally the following policies and measures:

Energy supply

1. Additional natural gas power plants
2. Geothermal power plants
3. Biofuels 10%

Buildings

4. Phasing out incandescent light bulbs
5. Phasing out resistive heaters
6. Construction of passive buildings
7. Gasification of the residential and the commercial sector

Transport

8. Extension of the railway to Bulgaria
9. Electrification of transport

In the period 2015-2030, the additional investments (relative to BAU scenario) needed for realization of the mitigation scenario are estimated at 4.2 billion Euros, while for realization of the higher ambition mitigation scenario they are estimated at 4.5 billion Euros. Besides on national investments, the implementation of the national mitigation policies and measures shall also depend on the involvement of the private sector (national and international) and on the access to new sources of finance and enhanced international support to be mobilized through new climate finance mechanisms, such as the Green Climate Fund.

Having in mind the EU type of national contributions (end year reductions, 2030 compared to 1990 levels), the Macedonian contribution was also translated into this type of contribution and different base year options were analyzed. The equity and the ambition of the Macedonian contribution is also expressed by comparing indicators as CO₂ emissions per GDP and CO₂ emissions per capita with the figures for the EU countries.

On the road below 2 degrees: Where does the world stand?

The problem has not been solved, and it will not be for years to come, but the new approach brought about by the Paris Agreement can be a key step toward reducing the threat of global climate change.

As the Climate Action Tracker has noted (Figure 1), the national mitigation contributions, now associated with the Paris Agreement, would lead to a median warming of around 2.7°C by 2100 (a full range of 2.2-3.4°), which means there is a likely chance of holding warming below 3°C.

Compared to the 3.6°C by 2100 warming that is projected to result from current policies, the climate pledges submitted in the INDCs lower warming by about 0.9°C – but only if all governments fully implement their pledges.

The national contributions are, in aggregate, also not yet consistent with the global emissions objective for the 2nd half of the 21st century.

The emissions gap in 2030 between governments' INDCs and a 2°C consistent pathway, currently around 17 GtCO₂eq, could be closed by 4.6–7.8 GtCO₂eq or around 25-45%, without imposing additional economic burdens over the next 15 years on the governments undertaking the additional effort.

A positive element in the agreement is therefore that countries are asked to 'formulate and communicate long-term low greenhouse gas emission development strategies.' Developed countries

that already have 2050 targets can review their plans in the context of the agreed goals, as most of these plans must be strengthened, and developing countries can build on the experience of the INDC process to work from existing plans and develop longer-term visions.

What warming would result from INDCs submitted by COP21?

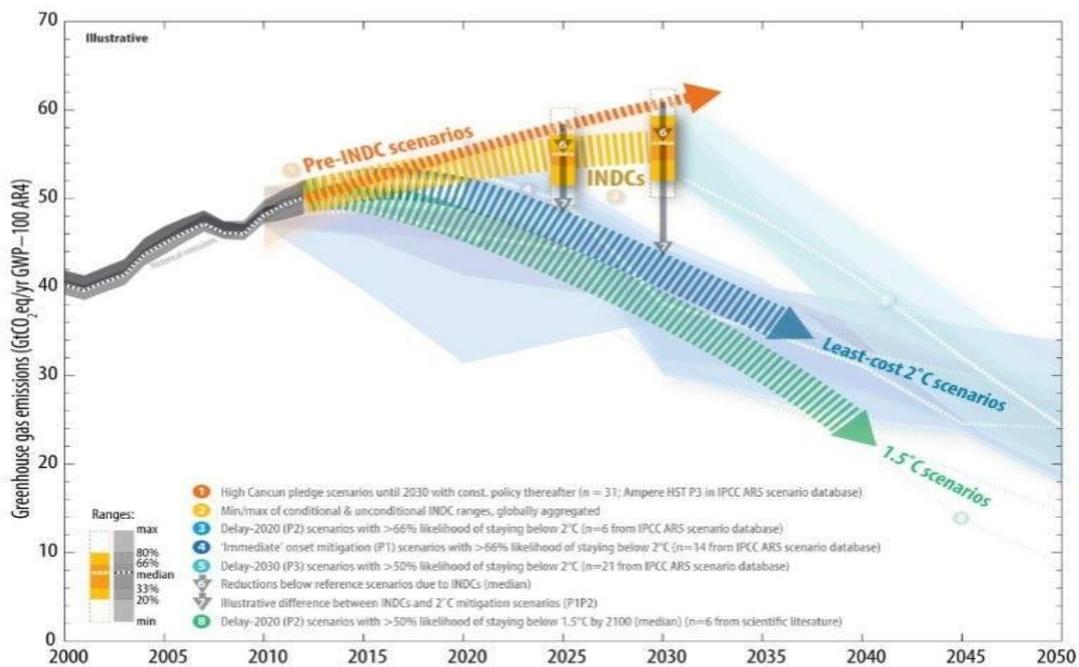
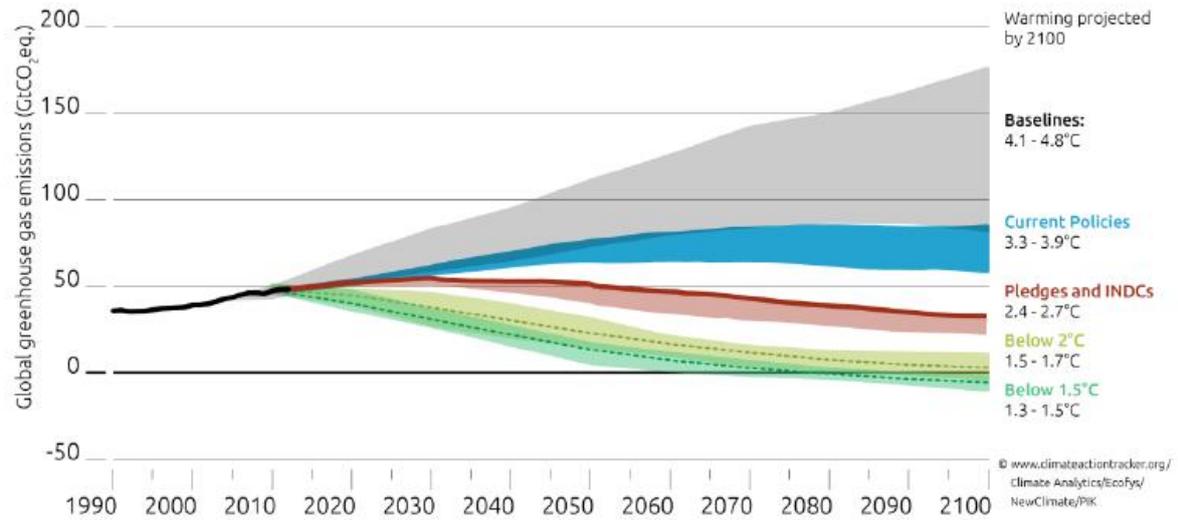


Figure 1. Emissions pathways and projected temperatures in 2100 under current policy and pledge scenarios

Raising ambition

Elements crucial to raising the ambition in the Paris Agreement are:

- Provisions to update the actions of countries every five years, while each successive step has to be at least as strong as the current one. This can start with a government submitting an updated climate pledge when it ratifies the agreement. **Then new or renewed contributions for 2030 have to be submitted 9-12 months in advance of the Conference of the Parties in 2020.**
- A government can adjust its contribution to enhance its climate action pledge at any time.
- Individual review of the actions will include suggestions for improvement for each country.
- A global stock-take will regularly measure progress, starting 2018.
- A facilitative implementation committee will assist governments in implementing their pledged actions.
- Countries will continue to work together to increase ambition before 2020.

Sustainable Development Goal 13

The Sustainable Development Goal (SDG) 13 calls for an urgent action to combat climate change and its impacts, which should be undertaken along three lines:

- Target 13.1: Strengthen **resilience and adaptive capacity** to climate-related hazards and natural disasters in all countries.
- Target 13.2: Integrate **climate change measures into national policies**, strategies and planning.
- Target 13.3: Improve **education, awareness-raising and human and institutional capacity** on climate change mitigation, adaptation, impact reduction and early warning.

Main strategic goals/priorities

The main strategic goals/priorities from the relevant national strategic and planning documents that are related to SDG 13 are listed below:

Target 13.1

- The adaptive capacity and resilience are addressed in the sectoral adaptation plans of the NCs (adaptation plans for agriculture, health, water resources, forestry, biodiversity), but generally there is no quantified targets in these areas.
- There are quite well elaborated problems and vulnerability assessments in most of the vulnerable sectors (agriculture, health, water resources, forestry, biodiversity)

Target 13.2

- Macedonian INDC towards Paris Agreement is the master target in the area of Climate Change, which reads: To reduce the CO₂ emissions from fossil fuels combustion for 30%, that is, for 36% at a higher level of ambition, by 2030 compared to the business as usual (BAU) scenario. The CO₂ emissions from fossil fuels combustion cover almost 80% of the

total greenhouse gases emissions in the country with a dominant share of the following sectors: energy supply, buildings and transport.

- A strong linkage between energy and climate change is recognized in Macedonian conditions also, primarily through the Key Challenge “Climate Change and Clean Energy” from the National Strategy for Sustainable Development (NSSD) which envisages a coherent and coordinated action in both areas primarily through energy efficiency and increased utilization of renewable energy sources.
- The latest Energy Strategy requires effective coordination with the Ministry of Environment and Physical Planning (as a key institution for climate change policy) and harmonization between energy and climate change policies, plans and legislations.
- The FBUR includes conceptual design of the nation MRV framework.

Target 13.3

- NCs and FBUR included dissemination and awareness rising components and participatory approach and stakeholder consultation have been regularly applied.
- Gender issues were addressed in the FBUR.
- The Communication Strategy for climate changes developed under TNC and Climate Change website www.klimatskipromeni.mk maintained by UNDP, which is highly informative and regularly updated, have considerably contributed towards awareness rising of various target groups.

Needs assessment

Overall, the awareness about Climate Change and the need for its diffusion in the national policies and strategic planning, as well as in a daily life of every individual is considerably rising among the policy makers and other relevant stakeholders, including citizens themselves. Specifically for the SDG 13 targets, the following can be inferred:

Target 13.1

As to the adaptation and resilience, although there are quite well elaborated problems and vulnerability assessments in most of the vulnerable sectors (agriculture, forestry, health, water resources, biodiversity) there is a room for better integration in the sectoral policies and more elaborated sectoral planning with appropriate monitoring framework and quantifiable and measurable indicators of achievement. Also there is a need for overall National Adaptation Plan (NAP).

Target 13.2

The SDG13 is relatively well addressed when it comes to mitigation due to Macedonian INDC, which is based on a profound analytical work and has been determined in an intensive dialog with the relevant policy makers and other stakeholders (participatory manner). Also, there is an adequate linkage with the national strategic planning in the relevant sectors since the Macedonian INDC is not a separate plan, but maps all the existing and planned activities in the country which lead to GHG emission reduction. As such, it is in compliance with the existing strategic and planning documents, and reflects the policies in the relevant sectors, mostly in the energy and transport sectors.

Policy interventions are needed in order to particularize the conceptual MRV framework from the FBUR, enabling thus effective monitoring, reporting and verification system for the mitigation actions. That system will certify the achieved emissions reductions, enabling thus to follow the

achievement of the target. Also appropriate MRV scheme should be adopted for adaptation measures, starting with the measures addressing the most vulnerable issues.

Equally important is that the effective MRV would attract international financing of mitigation and adaptation measures, given the fact that all the financial institutions require validated and verifiable emissions reductions and adaptation achievements.

The Target 13.2 is largely linked to the findings of the 2015 EU Progress Report (the chapter on the Environment and Climate Change), stating that the environmental protection and climate action requirements are still not well integrated into other areas of policy-making and the country is at the early stages of transposing and implementing EU climate acquis.

Target 13.3

This target is relatively well addressed when it comes to awareness-raising, communication/dissemination. However, data are not collected to measure the level of implementation of the Communication Strategy. Systematic approach is missing when addressing education, human and institutional capacities. There is a need for pertinent curricula at all levels of education, as well as integration of climate change issues into national R&D and Innovation priorities.

As presented above, despite adequate coverage of the SDG13 targets into the national strategic documents in the areas of mitigation, vulnerability assessments, awareness and dissemination, still there are gaps with regards to the SDG 13, related to the adaptation and resilience sectoral planning, as well as appropriate monitoring framework and quantifiable and measurable indicators of achievements in both, mitigation and adaptation.

Cross-sectoral linkages

In Macedonian conditions, the **most important cross-sectoral linkages of SDG13** include the following sectors:

Climate Change Adaptation and Resilience: Agriculture and food security, forestry, health, water resources, biodiversity, spatial planning, land management, urban planning, rural development, tourism, disaster risk reduction.

Climate Change Mitigation: energy, transport, buildings, industry, waste, water, agriculture, forestry.

Climate Change horizontal issues: education, R&D and innovation, communication strategies of relevant sectors, reforms of administration, gender

Linkage with other SDGs: SDG 13 is interconnected with almost all, but the most pronounced connection is demonstrated with SDG 7: Affordable and clean energy, SDG 11: Sustainable cities and communities and SDG 3: Good health and well-being, SDG 12: Sustainable Consumption and Production and SDG 15: Life on Land

Indicators

Mostly, the SDG13 indicators are of global character, measuring the number of countries which adopted/implemented/integrated something. Therefore, at country level, those indicators will be of YES/NO type.

The master indicator for SDG 13 will be the national greenhouse gases emissions. Other national indicators could include, but are not limited to: investments in mitigation, investments in adaptation, carbon intensity (emissions per GDP, or per capita) and others.

Reporting requirements

The main components of the climate change reporting include the following:

- The national GHG Inventory
- Mitigation policies and measures and projections of emissions
- Adaptation policies and measures

Besides these, the countries are required to report their horizontal activities, but in general, the content and level of detail is not prescribed.

UN aspect

The reporting to UNFCCC is conducted through National Communications, Biennial Update Reports, and National Inventory Report, which have pre-defined content and level of detail (Figure 2).

The GHG inventory has to be reported by both Annex I and non-Annex I Parties (marked in yellow in Figure 2), but the required content of National Inventory Reports (including tables) and the timetable for its submission is different.

| | Annex I Parties | | | Non-Annex I Parties | | |
|--------------------------|----------------------------------|---|---|--|---|---|
| | National Inventory Report | | | National Inventory Report as section of the BUR | | |
| | Biennial Report | | | Biennial Update Report | | |
| | National Communication | | | National Communication | | |
| National circumstances | X | | | X | | |
| Greenhouse gas inventory | X | X | X | X | X | X |
| Mitigation actions | X | X | | X | X | |
| Projections | X | X | | | | |
| Adaptation measures | X | | | X | | |
| Technology / finance | X | X | | encouraged | X | |
| Research | X | | | encouraged | | |
| Education | X | | | encouraged | | |

Fig. 2 Reporting of GHG Inventory in national reports as Annex I and non-Annex I Party

The Table 1 summarizes the UN reporting requirements for GHG inventory and National Communications, BURs, and Mitigation Action and highlights how the specific issues are implemented in Macedonian conditions. The level of implementation is evaluated as: **Annex I like**, **Tends to Annex I like**, **Steps towards Annex I like**, or **Non Annex I**.

Table 1: Summary of UN reporting requirements

| | Annex I Party | Non Annex I Party | Macedonia |
|--------------|--|---|---|
| | GHG Inventory Requirements | | |
| Frequency | Submit annual inventories to the UNFCCC in an electronic format. | No set frequency; can be submitted in hard copy. Upon availability of resources | GHG inventory submitted in electronic format as part of the National Communication or Biennial Update Reports. Annex I like |
| Coverage | Trends in emissions of the six primary GHGs ¹ , from 1990 to the most recent year for which data is available; includes sectoral background data. Kyoto inventory systems have additional structural detail. | Trends in emissions for CO ₂ , CH ₄ , and N ₂ O only, with estimates for other gases encouraged but not required from 1990 or 1994 for the first inventory and 2000 or later for the second; sectoral background data is not required. | Trends in emissions of the six primary GHGs are reported for 1990-2012, including the sectoral background data. Annex I like |
| Standards | Use both the IPCC Guidelines and Good Practice Guidance and thoroughly document emissions estimation methods and data sources. | Use IPCC Guidelines; use of the Good Practice Guidance encouraged but not required. Documentation of methodologies is encouraged. | The 2006 IPCC Guidelines and Good Practice Guidance used for reporting; Emissions estimation methods and data sources are thoroughly documented. Annex I like |
| Methods | Generally adopt higher-tier methods | Generally adopt lower-tier methods | Higher-tier methods are generally adopted. Annex I like |
| Review | Subject to annual review by expert teams following agreed upon review guidelines. At least once every five years, inventory systems are subject to a more detailed in-country review. Parties to the Kyoto Protocol are subject to more rigorous review, and if review teams determine a Party's inventory report or system is deficient, the Party may be judged to be out of compliance and subject penalties | No subject to review | Voluntary review by experts under the National Communication Supporting Programme (NCSP) conducted. Tends to Annex I like |
| | National Communications, BURs, and Mitigation Action Requirements | | |
| NC Frequency | Submitted every five years | No specified frequency | Voluntary, submitted every five years Tends to Annex I like |

| | | | |
|------------------|--|---|---|
| NC Content | National Communications include a description of each mitigation policy and measure, organized by sector and gas. Description includes status, implementing body, and, if possible, estimated effect on emissions to date and in the future. | Encouraged but not required to report on mitigation policies and measures. | National Communications include a description of each mitigation policy and measure, organized by sector and gas. Tends to Annex I like |
| BR/BUR Frequency | First one on 1 January 2014, then every two years | First one in December 2014, then every two years | First one in December 2014, than every two years Annex I like |
| Content BR/BUR | Outline progress in achieving emission reductions and the provision of financial, technology and capacity-building support to non-Annex I Parties. | GHG inventory not more than four years old Information on mitigation actions | GHG Inventory from 1990-2012 Information on mitigation actions Steps towards Annex I like |
| Actions | Subject to binding national emissions targets, and international monitoring and reporting requirements to verify the achievement of these targets | None | Voluntary international monitoring and reporting requirements Steps towards Annex I like |
| Review of NC | National Communications are also subject to international expert review, conducted in accordance with internationally-agreed guidelines | Not subject to review | Not subject to review Non Annex I |
| Review of BR/BUR | Subject to international expert review, conducted in accordance with internationally-agreed guidelines. | Process of international consultation and analysis (ICA) | Process of international consultation and analysis (ICA) Non Annex I |

In the case of Macedonia, the GHG inventory reporting to a great extent is “Annex I like” or “Tends to Annex I like”. It meets the necessary technical conditions for ensuring sustainability, since a strong focus is put on documenting essential information in a concise format, the activities and tasks are standardized and clear procedures stipulated, as well as the roles and responsibilities of all players are clearly defined. Also it is publicly accessible, as the inventory database, documents and infographics are published at <http://www.unfccc.org.mk/Default.aspx?LCID=229>

Despite the fact that Macedonia is not an Annex I Party, it is voluntarily trying to incorporate the Annex I UNFCCC reporting principles as much as possible in the framework of the National Communication or Biennial Update Reports. Having in mind that WOM, WEM and WAM scenarios are the main element of reporting for the national mitigation efforts of Annex I countries, the mitigation analyses within the FBUR was conceptualized for the first time in this manner. Furthermore, as a part of FBUR a conceptual Monitoring, Reporting and Verification (MRV) framework was developed including an

appropriate institutional setting. All these achievements have also contributed to capacity building in the country, both, the analytical and the capacities of policy makers and all stakeholders to respond to more demanding reporting requirements.

EU aspect

As Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, the European Union and Member States are required to report annually on their GHG emissions. They also have to report regularly on their climate change policies and measures through National Communications.

The annual EU GHG inventory report is prepared on behalf of the European Commission by the European Environmental Agency each spring. In line with UNFCCC reporting requirements, each Member State's annual inventory covers emissions up until two years previously.

The relevant EU legislation includes:

- Regulation (EU) No 525/2013 of the European parliament and of the Council on mechanisms for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC (hereinafter: Monitoring Mechanism Regulation or MMR).
- Commission Implementing Regulation (EU) No 749/2014 of 30 June 2014 on structure, format, submission processes and review of information reported by Member States pursuant to Regulation (EU) No 525/2013 of the European Parliament and of the Council.
- Commission Delegated Regulation (EU) No 666/2014 of 12 March 2014 establishing substantive requirements for a Union inventory system and taking into account changes in the global warming potentials and internationally agreed inventory guidelines pursuant to Regulation (EU) No 525/2013 of the European Parliament and of the Council.

Regulation (EU) No 525/2013 on mechanisms for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change (hereinafter: Monitoring Mechanism Regulation or MMR) revises and strengthens the EU's greenhouse gas monitoring and reporting framework in order to provide a better platform for EU action to tackle climate change. It fully substitutes the Decision No 280/2004/EC (Monitoring Mechanism Decision or MMD). Its main goals include improving the quality of the data reported, enabling the implementation of the Climate and Energy package through accurately tracking the progress of the Union and EU Member States towards meeting their emission targets for 2013-2020 and taking into account the periodic update at international level of the use of metrics (Global warming potentials) and methodologies (IPCC Guidelines) in the determination of greenhouse gas inventories.

MMR implements a new review and compliance cycle, established under the Effort Sharing Decision, for member states' binding annual emissions targets. They incorporate enhanced reporting on several topics, including land use, land-use change and forestry (LULUCF), maritime transport, climate adaptation, non-CO₂ impacts of aviation, and the use of revenues from auctioning of carbon allowances under the revised EU Emissions Trading System (EU ETS) Directive. They also introduce reporting on financial and technology support provided to developing countries, which would most likely go beyond the new UNFCCC reporting requirements on support.

MMR requires each EU member to establish a national, integrated system for preparing emissions projection scenarios and evaluating policies and measures. Members would be required to clearly

layout the procedures and institutional arrangements for preparing emissions projections, as they currently do for inventory preparation. The revisions also require member states to check that the activity data, background data, and assumptions used to estimate emissions for GHG inventories are consistent with data used for reporting under legislation related to air pollution.

The MMR also requires Member States to report to the Commission information on their national adaptation planning and strategies, outlining their implemented or planned actions to facilitate adaptation to climate change. That information shall include the main objectives and the climate-change impact category addressed, such as flooding, sea level rise, extreme temperatures, droughts, and other extreme weather events.

Energy Community (EnC) developments

MMR has also entered EnC *acquis communautaire*. On its last meeting, the Ministerial Council of EnC adopted a recommendation on the monitoring of greenhouse gas emissions (Annex 1). It is recommended that the Contracting Parties prepare the legal and institutional preconditions for the implementation of the core elements of MMR in their jurisdictions.

Under the Western Balkan (WB) Sustainable Charter, among others, the six WB countries (WB6) should explore the best way for improving their systems for monitoring, reporting and planning their energy and climate policies and aligning them with EU MMR. The specific activities to be undertaken in order to Foster climate action and transparency of sustainable energy markets are presented in Annex 2.

Recommendation for Macedonian reporting

In light of Paris Agreement and Macedonian NDC, which at the same time is the master target of the SDG13, and taking into account UN and EU aspects, the following can be recommended for each of the main components:

GHG Inventory

(Required in: UN reporting – NCs and BURs; EU MMR – reporting on GHG emissions; tracking the SDG13 implementation)

- Maintain the current practices of inventory preparation;
- Enhance the reporting on land use, land-use change and forestry (LULUCF);
- Institutionalize the GHG Inventory (from project based to process based).

Mitigation policies and measures and emissions projections

(Required in: UN reporting – NCs and BURs; MMR reporting on mitigation policy and measures and projections; tracking the NDC implementation; tracking the SDG13 implementation)

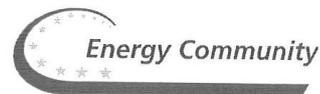
- Create enabling environment for implementation of mitigation measures (de-risking);
- Facilitate and encourage leadership by sub-national and private actors such as cities, regions, business and civil society in NDC implementation and future revisions;
- For each of the identified mitigation measures elaborate a MRV system which should be in compliance with the EU MMR and include procedures and institutional arrangements that best reflects the specific conditions of Macedonia and its mitigation obligations. That will enable tracking the progress toward the mitigation target and attracting international climate finances for the domestic mitigation measures. To start with the highest priority measures (with highest mitigation potential and lowest specific costs);

- Develop mechanisms for tracking the investments in CC mitigation;
- Maintain the extensive analytical work for scenario development and emissions projections, creating thus a solid analytical base for future revisions;
- Include evaluation of co-benefits of mitigation measures and use them among the criteria for prioritization.

Adaptation policies and measures (UN reporting – NCs; MMR reporting on adaptation; tracking the SDG13 implementation)

- The government to adopt a National Adaptation Plan;
- Develop MRV scheme for adaptation measures, starting with the measures addressing the most vulnerable issues;
- Develop mechanisms for tracking the investments in CC adaptation;
- When developing the Adaptation chapter in NCs follow the MMR guidance for adaptation
- Facilitate and encourage leadership by sub-national and private actors such as cities, regions, business and civil society;
- The government to submit an updated climate pledge including vulnerability and adaptation components.

Annex 1: EnC Ministerial Council Recommendation on MMR



Annex 27a/14th MC/14-10-2016

RECOMMENDATION OF THE MINISTERIAL COUNCIL OF THE ENERGY COMMUNITY

R/2016/02/MC-EnC on preparing for the implementation of Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions

THE MINISTERIAL COUNCIL OF THE ENERGY COMMUNITY

Having regard to the Treaty establishing the Energy Community ("the Treaty"), and in particular Articles 2, 25 and 79 thereof,

Having regard to the proposal from the European Commission,¹

Whereas:

- 1) Article 2 of the Treaty defines the improvement of the environmental situation related to Network Energy in the Contracting Parties as one of its key objectives;
- 2) The energy sector is one of the most potent contributors to the emissions of greenhouse gases and therefore there are strong links between energy and climate policy;
- 3) The implementation of Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions² by the Contracting Parties may facilitate them to better monitor and report on their emissions of greenhouse gases and their progress towards their energy and climate targets;
- 4) The framework for regional cooperation established by the Energy Community and the assistance offered by its institutions and bodies can be essential in preparing the successful implementation of Regulation (EU) No 525/2013;
- 5) For its full and legally binding incorporation in the Energy Community, Regulation (EU) No 525/2013 will need to be further adapted under Article 24 of the Treaty;
- 6) The Environmental Task Force, at its meeting of 14 September 2016 discussed and endorsed the present Recommendation;
- 7) The Permanent High Level Group, at its meetings of 22 June 2016 and 13 October 2016 discussed and endorsed the present Recommendation,

HEREBY RECOMMENDS:

¹ C(2016) 5854 final, 19.9.2016.

² OJ L 165, 18.6.2013, p. 13.

Article 1

1. The Contracting Parties should prepare the legal and institutional preconditions for the implementation of the core elements of Regulation (EU) No 525/2013 in their jurisdictions.
2. The Secretariat should assist the Contracting Parties' efforts in this respect. It should report to the Ministerial Council on the progress annually.

Article 2

1. In the framework of the Environmental Task Force, the Contracting Parties, the Secretariat and the European Commission should identify the provisions of Regulation (EU) No 525/2013 suitable for incorporation in the Energy Community, the necessary adaptations as well as appropriate deadlines.
2. The European Commission should regularly inform the Contracting Parties and the Secretariat on possible amendments to Regulation (EU) No 525/2013.

Article 3

Subject to a proposal by the European Commission, the Ministerial Council will decide on the adoption of a decision incorporating suitable provisions of Regulation (EU) No 525/2013.

Article 4

This Recommendation shall enter into force upon its adoption by the Ministerial Council.

Article 5

This Recommendation is addressed to the Contracting Parties and institutions of the Treaty.

Done in Sarajevo, on 14 October 2016

For the Ministerial Council:

A handwritten signature in black ink, appearing to be "M. ...", written over a dotted line.

(Presidency)

Annex 2: Western Balkan Sustainable Charter (actions under component 3)

| III | FOSTER CLIMATE ACTION AND TRANSPARENCY OF SUSTAINABLE ENERGY MARKETS | | | | | | | |
|-----|--|---|--|--|--|--|--|--|
| 1 | Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 | a | <ol style="list-style-type: none"> 1. Responsible entities to nominate focal points in charge for emission monitoring 2. Focal points to gather and review currently available data on greenhouse gas emissions to assess consistency and accuracy 3. Identify overlapping tasks between institutions and communicate results to the EnCS 4. Building on assistance provided by the EnCS, review current national legal framework on GHG monitoring and identify gaps with Regulation (EU) No 525/2013 | <p>Focal point identified</p> <p>Data gathered and reviewed</p> <p>Overlaps identified</p> <p>Legal framework reviewed</p> | <p>01/2017</p> <p>05/2017</p> <p>05/2017</p> | | | <p>Ministry of Energy, Ministry of Environment, Responsible entity for Climate Change Assisted by EnCS</p> |
| | | b | Building on assistance provided by the EnCS, responsible entities to establish national platform for GHG monitoring and reporting in accordance with Regulation (EU) 525/2013 | Platform established | 12/2017 | | | <p>Ministry of Energy, Ministry of Environment, Responsible entity for Climate Change Assisted by EnCS</p> |
| 2 | Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations | a | 1. Building on assistance provided by the EnCS, responsible entities to compare current monitoring practices in Contracting Parties, EU Member States, international level (UNFCCC) to detect possible gaps | Gaps identified | 05/2017 | | | <p>Ministry of Energy, Ministry of Environment, Responsible entity for Climate Change</p> |

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| | | | 2. Upon identification of gaps, responsible entities– in cooperation with the EnCS – to define measures ensuring transparency, accuracy, consistency, comparability and completeness of monitoring, reporting and planning on domestic climate and energy policies | Measures identified | 06/2017 | | | Assisted by EnCS |
| | | b | Government to adopt national roadmap for the implementation of the measures | Roadmap adopted | 12/2017 | | | |
| 3 | Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets | a | 1. Designate focal points within the government responsible for investment facilitation, protection and negotiation facilitation in the energy sectors 2. Based on an analysis of the existing situation and a template provided by the ECS, identify measures supporting investor confidence and protection 3. Government to adopt national roadmap for implementation of the measures. | Focal point designated Measures identified Consultation carried out | 03/2017 1/2018 03/2018 | | | Ministry in charge of energy Assisted by EnCS |
| 4 | Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner | a | 1. Ministry in charge of energy in cooperation with the EnCS, to establish a list of national administrative authorities exercising functions in/for the energy sectors 2. The EnCS to carry out governance, independence and performance audits of these authorities in cooperation with them and involving all stakeholders 3. The EnCS to provide recommendations based on the results of the audits | List established Audits carried out Recommendations provided | 12/2016 12/2018 12/2018 | | | Ministry in charge of energy Assisted by EnCS |

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| | | b | <ol style="list-style-type: none"> 1. The respective authorities and the EnCS to draft/adopt roadmaps for the implementation of the recommendations 2. Implementation of the roadmaps by the respective authorities | <p>Roadmaps adopted</p> <p>Roadmaps implemented</p> | <p>Within 3 months upon conclusion of the audit</p> <p>Within one year upon adoption of the roadmap</p> | | | <p>National authorities</p> <p>Assisted by EnCS</p> |
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