

Reporting on national system for  
policies and measures and projections  
under Regulation (EU) 2018/1999 on the Governance  
of the Energy Union and Climate Action

March 11, 2025

National Climate Commission

## 1.1 Name and contact information for the entities with overall responsibility for the National Systems for policies and measures and projections

The National system for policies and measures and projections and the quality assurance and control programme currently in place in Belgium in application of the Governance Regulation has been prepared by the following entities:

Walloon Agency for Air and Climate (AWAC)  
Av. Prince de Liège 7/2 5100 Jambes – Belgium  
Telephone +32 (0) 81-33 59 54  
<http://www.awac.be/index.php>

Flemish Energy and Climate Agency (VEKA)  
Postadres: Koning Albert II-laan 15 bus 460, 1210 Brussel  
Bezoekadres: Havenlaan 88, 1000 Brussel  
<https://www.vlaanderen.be/veka>  
E-Mail: [margot.vancauter@vlaanderen.be](mailto:margot.vancauter@vlaanderen.be)

Brussels Environment  
Avenue du Port 86C/3000 B-1000 Bruxelles – Belgium  
Telephone +32 (0)2 563 43 38  
<http://www.environnement.brussels/>  
E-Mail: [mcadena@environnement.brussels](mailto:mcadena@environnement.brussels)

Federal Planning Bureau  
Avenue des Arts, 47-49 – 1000 Brussels – Belgium  
<http://www.plan.be>  
E-Mail: Ingrid Bracke [ib@plan.be](mailto:ib@plan.be)

Federal Public Service for Health, Food Chain Safety and the Environment  
DG Environment - Climate Change  
Avenue Galilée, 5 Box 2  
B-1040 Brussels - Belgium  
<http://www.climatechange.be>  
E-Mail: [climate@health.fgov.be](mailto:climate@health.fgov.be)

The overall responsibility is borne by the National Climate Commission (see also institutional, legal and procedural arrangements in place for preparation of reports).

## 1.2 Institutional arrangements in place for preparation of reports on policies and measures and of projections as well as for reporting on them, including an organogram

The National Climate Commission (NCC) is composed of representatives of each party to the Cooperation agreement<sup>1</sup> at political level. The NCC has overall responsibility for the establishment, execution and monitoring of the National Climate Plan and for fulfilling reporting obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol and EU legislation (Monitoring Mechanism Regulation (EU) 525/2013 ; Governance Regulation (EU) 2018/1999).

CONCERE is a consultative group that strengthens cooperation between the federal and regional governments in the field of energy. This cooperation was formalised on 18 December 1991 by the cooperation agreement on the coordination of energy-related activities concluded between the Federal State, the Walloon Region, the Flemish Region and the Brussels-Capital Region. In practice, this agreement led to the creation of CONCERE (in Dutch: ENOVER).

CONCERE brings together:

- delegates from the four administrations and four cabinets responsible for energy,
- Belgium's Permanent Representation to the European Union (EU),
- the Directorate-General for Coordination and European Affairs of the Federal Public Service Foreign Affairs.

The CONCERE group carries out the following tasks:

- to organise consultation between the federal government and the regions;
- to preserve the internal consistency of the energy policy measures of the competent authorities;
- centralising information with a view to adapting legislation in the areas concerned;
- promoting the exchange of information between the competent authorities;
- collecting data to respond to requests for information from international organisations and to draw up energy balances;
- composing the Belgian delegation to international organisations;
- developing coordinated and logically structured positions to be presented by the Belgian delegation to international bodies, particularly the Council of the EU (e.g. preparation of European directives).

The NCC is assisted by a permanent secretariat and several thematic working groups (WG) which are mandated to address different issues. Two thematic working groups have been set up in relation to “policies and measures” and “projections”:

- WG PAMs (e.g. monitor the National Climate Plan, assess the status of policies and measures implementation, quantify the GHG impact, ensure a harmonization of methodologies and assumptions used in the implementation framework of the European Directive 2006/32/EC, prepare official reports under the governance regulation, specific section of the UNFCCC

---

<sup>1</sup> Accord de coopération du 14 novembre 2002 entre l'Etat fédéral, la Région flamande, la Région wallonne et la Région de Bruxelles-Capitale concernant l'établissement, l'exécution et le suivi d'un Plan national climat, ainsi que l'établissement de rapports, dans le cadre de la Convention-cadre des Nations Unies sur les changements climatiques et le Protocole de Kyoto : [https://www.cnc-nkc.be/sites/default/files/content/swaklimaat\\_2002\\_fr\\_nl.pdf](https://www.cnc-nkc.be/sites/default/files/content/swaklimaat_2002_fr_nl.pdf)

Biennial Report and National Communication, punctually contribute to the work of the CCC-WG2 ...)

- WG Projections (e.g. harmonizing projections on greenhouse gas emissions made by the federal and regional authorities, preparing official reports, specific section of the UNFCCC Biennial Report and National Communication, contribution to the work of the CCC-WG2...)

For the purpose of preparing National Energy and Climate Plans and related progress reporting in implementation of the Governance Regulation, a CONCERE-NCC joint steering committee has been set up. The preparation and approval of the PAM progress reporting is done in cooperation between NCC and CONCERE. The preparation and approval of the national projections of anthropogenic greenhouse gas emissions is the responsibility of the NCC.

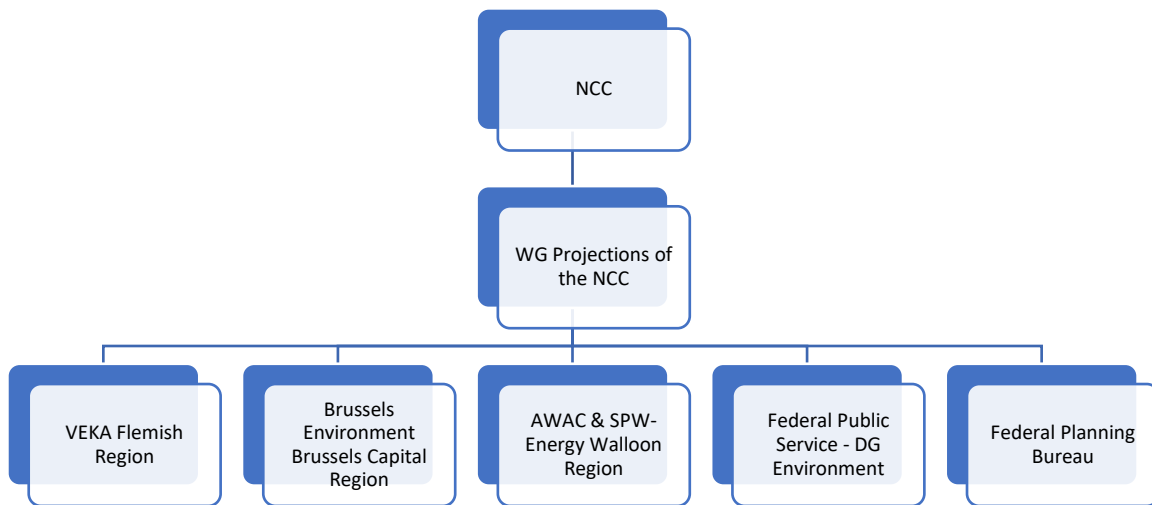


Figure 1: Main bodies involved in the preparation of the national report on projections

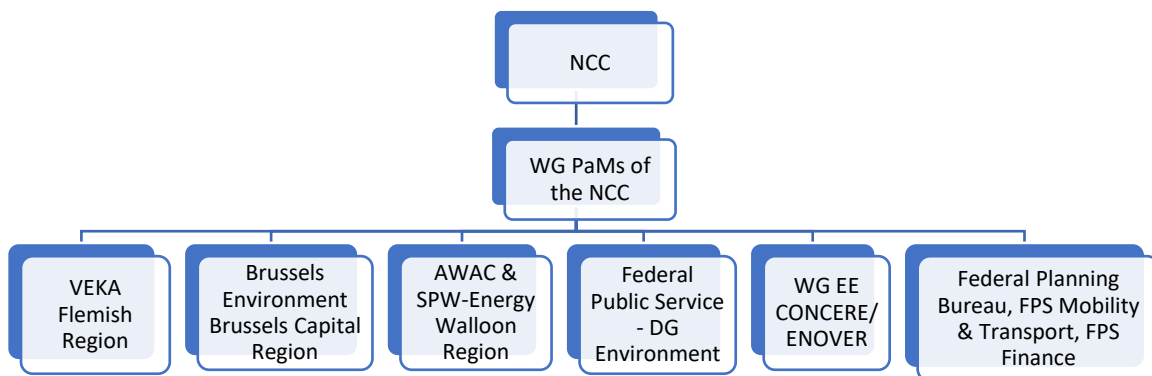


Figure 2: Main institutions and organisations involved in the preparation of the national report on policies and measures

The main administrations involved in the working groups PAMs and Projections are :

- The Flemish Energy and Climate Agency (VEKA) in the Flemish Region;
- The Walloon Agency for Air and Climate (AWAC) (in collaboration with Energy Department of Public Service of Wallonia) in the Walloon Region;
- Brussels Environment in the Brussels Capital Region.
- Federal public service (DG Environment / Climate change section)

Each region also has its own legal and institutional arrangements, as well as at the federal level (see below).

### 1.2.1 Flemish Region

Administrations/agencies in the Flemish Region, which are involved in the national system, are listed below.

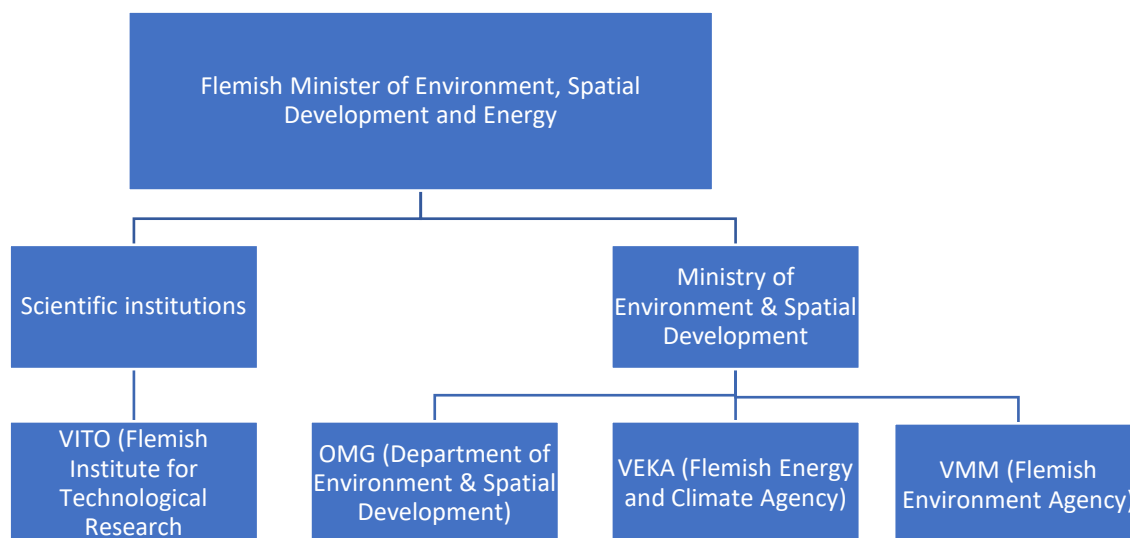


Figure 3: Main institutions and organisations involved in the preparation of the Flemish GHG Projections and PAMs

### 1.2.2 Walloon Region

The Walloon Agency for Air and Climate (AWAC), is the Walloon administration with the overall responsibility for setting up the Walloon projections and report on Policies and Measures. This is stated in the following decree of the Walloon Government:

*3 JUILLET 2008. - Arrêté du Gouvernement Wallon portant organisation de l'Agence Wallonne de l'Air et du Climat*

*5° de réaliser des études et des analyses afférentes à la qualité de l'air et à l'évolution du climat, et en particulier :*

- récolter des informations et les stocker, notamment sous la forme de bases de données;*
- réaliser des cartographies et des inventaires réguliers d'émissions*

Within the AWAC, 2 FTE are involved in Climate Plan (PAMs) and Air pollutants projections (GHG and other air pollutants).

Energy Department of Public Service of Wallonia (the equivalent of 1 FTE) is also involved in working on Walloon energy projections and monitoring of energy policies and measures.

Some other administrations contribute to specific aspect (i.e. SPW-Mobility, ...).

### 1.2.3 Brussels Capital Region

Brussels Environment is responsible for issues related to the environment and energy of the Brussels Capital Region. It is responsible for the policies and measures and projections of GHG emissions reporting. Figure 4 shows the main institutions involved in the PAMs and projections.

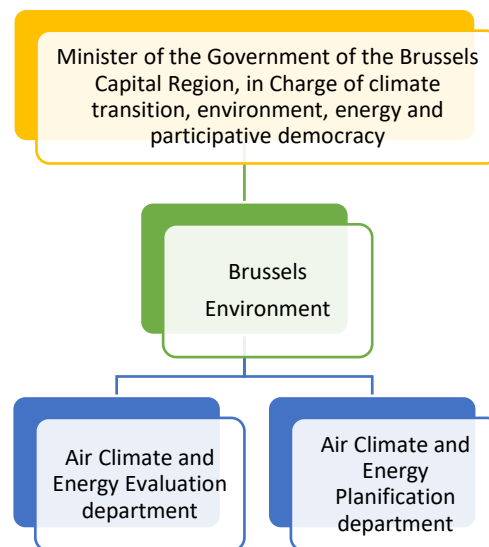


Figure 4. Main institutions involved in the preparation of the Brussels PAMs and Projections

### 1.2.4 Federal level

A federal MRV law was adopted on 28 October 2016<sup>2</sup>. It puts in place the framework for the reporting, monitoring and evaluation of federal policies and measures in the field of climate change and ozone layer protection. According to the Law all entities and departments of the federal authority in possession of relevant data and information shall communicate them annually in order to guarantee the timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported.

Reporting, monitoring and evaluation of federal actions in accordance with the governance regulation is under the responsibility of the climate change unit of the Directorate General Environment of the Federal Public Service health, food chain safety and environment, as stated in the Royal Decree of 22<sup>nd</sup> December 2006<sup>3</sup>.

<sup>2</sup> (NL)

[https://www.ejustice.just.fgov.be/cgi\\_loi/change\\_lg.pl?language=nl&la=N&cn=2018091806&table\\_name=wet](https://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=nl&la=N&cn=2018091806&table_name=wet) / (FR)

[https://www.ejustice.just.fgov.be/cgi\\_loi/change\\_lg.pl?language=fr&la=F&cn=2016102803&table\\_name=loi](https://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&la=F&cn=2016102803&table_name=loi),

<sup>3</sup> Arrêté royal du 22 décembre 2016 portant exécution de l'article 2, § 1er, de la loi du 28 octobre 2016 portant sur les modalités d'application du Règlement (UE) n° 517/2014 du Parlement européen et du Conseil du 16 avril 2014 relatif aux gaz à effet de serre fluorés et abrogeant le règlement (CE) n° 842/2006 et du Règlement (UE) n° 525/2013 du Parlement européen et du Conseil du 21 mai 2013 relatif à un mécanisme pour la surveillance et la déclaration des émissions de gaz à effet de serre et pour la déclaration, au niveau national et au niveau de l'Union, d'autres informations ayant trait au changement climatique et abrogeant la décision n° 280/2004/CE

Practical modalities for information gathering, monitoring and evaluation of federal PAMs have been translated in a Royal Decree<sup>4</sup>, in accordance with article 2§2 of the law.

Concerning projections, the Federal Planning Bureau (FPB), [a public agency, whose mission is to achieve studies and projections on economic, social and environmental policy issues and on their integration within the context of sustainable development,] is in charge of the macro-economic analysis for the WG Projections (to the extent possible, see “Procedural and administrative arrangements”).

On 2 April and 8 October 2021, the government established a system for effective and regular monitoring of the implementation of federal policies and measures<sup>5</sup>. This governance-cycle currently provides for a 6-monthly evaluation and yearly public reporting<sup>6</sup> on the operationalisation of policies and measures based on '*policy roadmaps*' for each group of related PAMs. These roadmaps consist of a detailed implementation-calendar, a budgetary overview, indicators to follow-up implementation progress and impact, and a GHG and socio-economic impact assessment. The federal governance is aligned to European reporting obligations.

A law legally enshrining this policy cycle has been adopted on 15 January 2024. A task force<sup>7</sup> is set up. The law introduces the creation of an independent expert committee<sup>8</sup> to review federal climate policy and issue opinions and a monitoring and reporting system to ensure the effective use of the federal share of revenues from the auctioning of emission allowances (ETS) in the budget<sup>9</sup>.

### 1.3 Legal arrangements in place for preparation of reports on policies and measures and of projections

In the Belgian federal system, responsibilities and policy-making powers regarding climate policy are shared between the Federal State and the three Regions (the Walloon, Flemish and Brussels-Capital Regions). Therefore, climate change policies are designed and implemented by the federal and regional governments, which set up their own priorities and objectives within the scope of their powers.

Regions have major responsibilities in areas such as rational use of energy, promotion of renewable energy sources, public transport, transport infrastructure, urban and rural planning, agriculture and waste management. In the context of the 6th Belgian state reform, they have also obtained new fiscal responsibilities.

The Federal state is responsible for large parts of fiscal policy. It is also responsible for product policies (norms, fuel quality, labelling and performance standards for household or industrial electrical goods,...). It is responsible for ensuring the security of the country's energy supply and for nuclear

---

<sup>4</sup> Arrêté royal du 18 septembre 2018 relatif aux modalités de collecte de données, de surveillance et d'évaluations des actions fédérales dans le cadre des obligations de déclaration imposées par le Règlement (UE) n° 517/2014 et le règlement (UE) n° 525/2013

(NL)

[https://www.ejustice.just.fgov.be/cgi\\_loi/change\\_lg.pl?language=nl&la=N&cn=2018091806&table\\_name=wet](https://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=nl&la=N&cn=2018091806&table_name=wet),

(FR)

[https://www.ejustice.just.fgov.be/cgi\\_loi/change\\_lg.pl?language=fr&la=F&cn=2018091806&table\\_name=loi](https://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&la=F&cn=2018091806&table_name=loi)

<sup>5</sup> (NL) <https://klimaat.be/doc/2021-03-30-note-conseil-ministres-nl.pdf> / (FR) <https://klimaat.be/doc/2021-03-30-note-conseil-ministres-fr.pdf>

<sup>6</sup> (NL) <https://klimaat.be/doc/syntheserapport-klimaatgovernance-2022.pdf> / (FR)

<https://climat.be/doc/rapport-de-synthese-gouvernance-2022.pdf>

<sup>7</sup> <https://climat.be/politique-climatique/belge/federale/taskforce-energie-et-climat>

<sup>8</sup> <https://climat.be/politique-climatique/belge/federale/conseil-scientifique-du-climat>

<sup>9</sup> <https://climat.be/politique-climatique/belge/federale/utilisation-des-revenus-ets>



energy. It also supervises territorial waters, which implies that it is also responsible for the development of offshore wind farms.

In order to ensure consistency between climate policies put in place by the different authorities and promote cooperation between these authorities, a Cooperation agreement was adopted on 14 November 2002<sup>10</sup>. This cooperation agreement was set up to establish a National climate plan, and make sure that Belgium commits to its reporting obligations in the context of the UNFCCC, the Kyoto protocol and the EU governance regulation. It has established a National Climate Commission, which has overall responsibility for the execution of the cooperation agreement and for the establishment and follow-up of the climate policy in the National Energy and Climate plan. It is assisted by a permanent secretariat. In particular, the National Climate Commission has the following responsibilities:

- Ensure the exchange of information and reports between the parties (Federal state and Regions) on progress in implementing policies and measures contained in the National climate plan;
- Undertake the reporting obligations in the context of the governance regulation and the UNFCCC, in collaboration with the relevant departments and the Coordination Committee for international environmental policy (CCIEP);
- Make sure that methodologies, procedures, data analysis, projections used by the Parties to the agreement are compatible and, if possible, harmonized.
- Evaluate, in the last quarter of each year, the federal and interregional coordination and cooperation as well as the level of execution and impact (ecological, social and economic) of the policies and measures taken on the basis of the National Climate Plan. The results, reductions and projections will be compared to targets. On this basis, the National Climate Commission makes its proposals to the Extended Interministerial Conference for the Environment to improve cooperation and correct the National Climate Plan.

This cooperation agreement also contains specific provisions and obligations for the Federal state and the Regions in relation to data collection and exchange, and the establishment of reports:

- Regions are committed to submit every year to the National Climate Commission a report containing the required information allowing the federal government to report data in accordance with guidelines under the UNFCCC and the Kyoto protocol, and with the provisions of the EU governance regulation.
- The Federal state is committed to submit an annual report to the National Climate Commission on relevant socio-economic indicators, including basis statistics.
- The Federal state and the Regions are committed to submit annually and in an harmonised manner a progress report to the National Climate Commission on the implementation of the policies and measures contained in the National climate plan, which are relevant to their competences.

---

<sup>10</sup> Cooperation Agreement of 14<sup>th</sup> November 2002 between the Federal State, the Flemish Region, the Walloon Region and the Brussels-Capital Region regarding the development, execution and monitoring of a National Climate Plan as well as the reporting in the context of the United Nations Framework Convention on Climate Change and the Kyoto Protocol, available at <http://www.cnc-nkc.be> legal texts section.

## 1.4 Procedural and administrative arrangements and timescales in place for the preparation of reports on policies and measures and of projections, to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported

### 1.4.1 Projections

National projections of greenhouse gas emissions are prepared within the working group “Projections” of the NCC. These are based on the compilation of regional projections (bottom-up).

#### **Predetermined timeline**

- March (year X-1): harmonized values for key parameters which the Commission recommends twelve months before the deadline for submission of the reports.
- September-December (year X-1): Preparation of projection parameters and assumptions and final approval by NCC.
- February-March (year X): Projection calculations and data compilation (Regions +F-gas).
- March (year X): Compilation of the report, final approval by NCC and transmission to the EU Commission.

Regional projections are compiled within the WG Projections on the basis of the information reported by the regions and then submitted to the National Climate Commission for official approval.

Total estimates in the Belgian GHG projections reflect the sum of regional GHG projections. The quality of national GHG projections primarily depends on the quality of regional projections. Regions are responsible for the quality of methodologies and models used for the preparation of their regional GHG projections. They make sure, via the cooperation within the Working Group on Projections, that these methodologies and models are compatible (and, to the extent possible, harmonized) with those used in the other regions. The regions are also responsible for establishing QA/QC procedures for their regional projections (for more information, see description of QA/QC activities).

National GHG projections, as compiled by the WG projections serve as a basis for the assessment of progress of Belgium towards reaching its target and reporting under the governance regulation.

Alignment between GHG projections and projections under Directive (EU) 2016/2284 is the responsibility of the regions.

### 1.4.2 Policies and measures

Regional and federal policies and measures are monitored by the different responsible entities. This monitoring information is compiled at Belgian level by the Working Group PAMs, in order to inform the NCC and to prepare the different national reports (National communications and biennial reports under the UNFCCC, reports under governance regulation), which are submitted to the NCC for approval before final submission. The preparation and approval of the progress report in implementation of the governance regulation is a shared competence of NCC and CONCERE

Belgian authorities (Regions and Federal state) periodically evaluate the impact of their policies and measures (GHG emission reductions). Methodologies vary depending of the type of policies, the sector, the target, the availability of data, etc. To the extent possible, these methodologies are harmonized in order to ensure transparency and comparability, allowing among others to identify the most efficient measures.

In that sense, the NCC has created an ad-hoc working group, gathering representatives of each entity and various administrations concerned by elements of the NCP. In particular, the group integrates

representatives of the energy administrations in charge of monitoring and reporting the energy efficiency action plan established in the framework of Directives 2006/32/EC and 2012/27/EU relative to energy efficiency and services, to ensure a necessary harmonization of methodologies, hypotheses and parameters between climate and energy policies quantifications.

When possible, the working group provides estimates of the impact of measures (or groups of measures) on GHG emissions.

For this particular task, it is essential that the composition of the WG gathers representatives of Federal and Regional administrations which are the most closely involved in climate change policy: environment, mobility, economy, energy production, renewable energy sources and rational use of energy,...). Indeed, this participation of all relevant areas ensures coherence and harmonization in the selection of methodologies, parameters and assumptions, that happen to be common in order to quantify the impact of measures on energy savings and GHG emissions.

### 1.5 Description of the information collection process

The collection process for the preparation of the projections and PAM reporting takes place within the regional and federal entities. In the accompanying report on projections and PAM reporting, specific explanations are always given on the origin of the source data used.

The following information is added specifically for the federal evaluation of the impact of PAMs:

The federal public service health, food chain safety and environment commissioned regular comprehensive evaluations<sup>11</sup> to evaluate the GHG and socio-economic impact of the main group of federal climate and energy policies (ex-ante and ex-post).

All federal administrations involved in the development and implementation of federal PAMs take part in the steering committee of these studies. These include ministries of transport, energy, finance, etc. The collection of data is made based on the *Measuring, Reporting and Verification* (MRV)-law of 2016 and subsequent Royal Decree of 2018 (see 'institutional arrangements'). The steering committee discusses data access and availability, and seeks to provide ad hoc solutions, notably in case of interlinkages between federal and regional measures.

In complement to regular commissioned evaluations of policies and measures, the yearly federal governance-cycle that has been put in place in 2021 provides for further development and identification of indicators, evaluation methodologies and subsequent updates of GHG and socio-economic impact evaluations.

### 1.6 Description of the alignment with the national inventory system

It is the responsibility of the different entities to ensure consistency with the greenhouse gas inventory. In addition, the Belgian compilation is also double-checked with the Belgian inventory and consultation and exchange of information (including the inventory) takes place within the National Climate Commission on a continuous basis between the various working groups.

### 1.7 Description of the links to arrangements on integrated national energy and climate reports pursuant to Art. 17 of Regulation (EU) 2018/1999

It is the responsibility of the different entities to ensure coordination between climate and energy reporting. The energy and climate administration in the three regions has been merged or work closely

---

<sup>11</sup> <https://climat.be/politique-climatique/belge/federale/politique-climatiques-et-mesures-de-reduction-des-emissions> ; short URL : [www.climat.be/evaluation-PAMs](http://www.climat.be/evaluation-PAMs).

together. This automatically results in greatly improved cooperation and internal coordination of the climate and energy reports.

For the purpose of preparing National Energy and Climate Plans and related progress reporting in implementation of the Governance Regulation, a CONCERE-NCC joint steering committee has been set up. The preparation and approval of the PAM progress reporting is done in cooperation between NCC and CONCERE. The preparation and approval of the national projections of anthropogenic greenhouse gas emissions is the responsibility of the NCC.

## 1.8 Description of the quality assurance and quality control activities for reporting of policies and measures and projections

The objectives of QA/QC activities are to improve transparency, consistency, comparability, completeness, accuracy and timeliness in national projections.

- **Transparency** means that the assumptions and methodologies used should be clearly explained to facilitate assessment by users of the reported information.
- **Consistency** means that projections should be internally consistent in all elements over a period of historic and future years.
- **Comparability** means that estimates of emissions and removals reported should be comparable among Regions.
- **Completeness** means that all required information is reported.
- **Accuracy** means that projected estimates should be accurate in the sense that the reported trends are plausible as far as can be judged based on historic trends and surrogate datasets if available and that uncertainties inherent to the methodology and input data are reduced as far as practicable.

The Working group PAMs and the Working Group Projections of the National Climate Commission are responsible for the implementation of the QA/QC activities.

### 1.8.1 Projections

Quality assurance and control procedures are performed at several stages during the preparation of the national GHG projections.

Firstly, quality control checks of national GHG projections are performed by the Working Group Projections during the compilation. These QC checks aim at maintaining the quality of regional projections as they are being compiled and ensure the completeness and consistency of the projections. These checks include internal time series consistency, accurate aggregation of sectors, proper allocation of different sources and sink categories by gas and cross-checks of the compiled data by the different regional experts within the Working Group.

In addition to the Working Group checks, prior validation and verification work is done upstream by each region. This work consists in trends analysis and cross-validation by different regional actors. For instance, in Brussels Capital Region, trend analysis is done for the activity data and the resulting emissions to identify and correct outliers, there are also a series of crossed validation check done between the members of the projection team. The projected emissions of energy production, industry, commercial, residential, railways and inland navigation are calibrated with the regional energy balance. Moreover, all projected emissions are established in accordance with the regional emission inventories methodologies in order to assure consistency between the 2 data sets. Finally, mobility

projections are compared with other existing projection models developed in the region to assure coherence of the calculation.

Secondly, quality assurance checks of the Belgian GHG projections are carried out by the EEA's ETC/ACM to review the quality of the reported projections against quality criteria as specified in the Union System for Policies and Measures and Projections and the Quality Assurance and Control (QA/QC) programme as required under governance regulation.

An additional quality check consists of the comparison of the compiled regional bottom-up projections with national projections calculated by the FPB based on a macro-sectoral top-down econometric model (HERMES) (to the extent that HERMES projections are available, see "Procedural and administrative arrangements").

The top-down projections differ from the bottom-up projections in the way emissions are allocated and in the selected approach following the IPCC inventory guidelines (for example used tier levels).

### 1.8.2 Policies and measures

The quality improvement of the PAMs monitoring is linked to the estimate of PAMs impacts on the GHG emissions. It depends on:

- The quality of the collected data: availability, pertinence, dispersion of values, uncertainty/accuracy;
- Assumptions needed to model and calculate the impacts of PAMs on GHG emissions;
- Coherence and harmonization of data and assumptions used in the climate policy framework and in other domains (i.e. Energy efficiency).

The following information is added specifically for the federal evaluation of the impact of PAMs:

Evaluation studies conducted for the Federal administration of environment assess the impacts of sets of measures. In the context of those studies data quality and coherence of assumptions are also documented, estimated and discussed among the partners in the WG PAMs [www.climat.be/evaluation-PAMs](http://www.climat.be/evaluation-PAMs). The improvement of the quality of the impact evaluation of PAMs is ensured by successive and recurrent evaluation cycles (see '**procedural and administrative arrangements**' and '**description of the information collection process**').

### 1.9 Description of the process for selecting assumptions, methodologies and models for making projections of anthropogenic greenhouse gas emissions

The Working Group Projections starts the preparation of projections the year before the reporting year.

The first step is the choice of assumptions and parameters for the preparation of projections, to ensure a certain level of harmonisation between the 3 bottom-up regional models.

These assumptions include the recommended harmonised values delivered by the Commission for key supra-nationally determined parameters, including carbon prices under the EU Emission Trading Scheme (EU ETS), international oil and coal import prices, with the view of ensuring consistency of the aggregated Union projections. However, most of these values are not used in the bottom-up models used by the regions.

Other assumptions and parameters include demographic assumptions by regions, normalized degree-days, reference year for projections, electricity production harmonised at national level, planned

nuclear phase-out, road transport volumes, more general choices regarding the possible preparation of WEM and WAM scenario, choices regarding the parameters included in sensitivity analysis...

The set of assumptions and parameters prepared by the Working Group Projections are submitted to the NCC for official approval, before the preparation of regional and federal projections. This approval procedure aims to ensure the quality of the assumptions, the harmonization and comparability of regional projections and eventually the consistency of national GHG projections. The approval by the NCC is also needed to ensure that the assumptions properly reflect current political choices of the federal and regional governments, especially regarding policies and measures or electricity production.

The choice of methodologies and models is made by the different entities and summarized below.

#### 1.9.1 Flemish Region

A Flemish simulation model has been developed in 2014 (with annual updates and regular improvements since then) to construct short term projections for Flanders.

The simulation model is a projection model for energy demand, greenhouse gas emissions and emissions of air pollutants (SO<sub>2</sub>, NO<sub>x</sub>, PM and VOC) that covers most of the relevant emission sectors (energy sector, industry, waste, agriculture, residential and commercial buildings).

This simulation model works as a “bottom-up” type model, i.e. explaining energy consumptions and emissions from activity variables expressed as far as possible in physical units, and the main determining factors of the evolution of energy demand and emissions.

The model, which includes a database on the energy consumption, emission factors, activity data and reduction effects of climate & energy and air quality policy measures, can be used in particular for:

- the construction of a reference scenario (business as usual), representing the expected future evolution in the absence of any new emission reduction policy based on expected economic and demographic evolutions: With Existing Measures (WEM) Scenario;
- constructing emission reduction scenarios, based on the implementation of a combination of reduction measures With Additional Measures (WAM) Scenarios;
- assessing the impact of existing or draft legislations on energy consumption and emission levels.

#### 1.9.2 Walloon Region

A new model, called « *TIMES-Wal* » has been developed for Wallonia since 2016. The model is used for the first time for reporting purposes for WEM scenario (previously, Wallonia used EPM (Energy/Emissions Projection Model)).

TIMES-Wal :

- belongs to the “bottom-up” energy system models: it is based on a detailed technological set with associated costs and technical parameters;
- is an integrated model: one change in a sector can impact any other sector;
- is an optimization model;
- covers energy sectors (power sector, industry, residential, commercial, transport);
- has been built in close collaboration between public (the Public Service of Wallonia) and private actors (ICEDD and E4SMA).
- Complementary, a specific model (Sibyl baseline developed by Emisia) is used for road transport and some sectors are studied exogenously (i.e. agriculture, waste, ...).

For WAM scenario, a previous Excel tool used in the context of the Walloon Energy and Climate Plan is used.

Wallonia is in a transition period. Ultimately, the idea is to perform all the scenarios with the same tool(s), while best linking the different models used. Regularly updating models on the basis on the best available data collected through studies or actors is an important point of attention.

### 1.9.3 Brussels Capital Region

Brussels Environment has developed its own projection model for energy consumption and atmospheric emissions. The horizon of the projections is 2050. Every two years, the model is calibrated with the most recent regional energy balance, and other main data is updated (population, employment, climate, household size among other information).

As it is also a bottom-up type model, changes in consumption of the several energy carriers used in the Brussels-Capital Region (natural gas, light oil, propane/butane, coal, electricity, wood, solar and heat pump) and their associated emissions (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, NO<sub>x</sub>, NMVOC, SO<sub>x</sub>, NH<sub>3</sub>, PM) are determined by the evolution of parameters that define the consumption of each sector.

The projections for transport are also calculated with a projection model that distinguishes between road, railways and waterways transport and the horizon of projections is 2040.

### 1.9.4 Federal level

More information on the process for selecting assumptions and methodologies for the evaluation of **federal policies and measures** can be found in the successive studies available at [www.climat.be/evaluation-PAMs](http://www.climat.be/evaluation-PAMs)

In the context of the **projections** under the Governance Regulation and to the extent possible, the FPB produces a report with a WEM (and eventually a WAM) scenario based on macro-economic hypotheses (see “Procedural and administrative arrangements”). The projections of GHG emissions are based on the use of the macrosectoral HERMES model suitable to short- and medium term forecasts. The model is also used for variant analysis. Main elements of the report are extracted and included in the final national projection report. In the future, another type of model more in line with the time horizon foreseen in the regulation is envisaged, but will require new human resources.

## 1.10 Description of procedures for the official consideration and approval of the Member States national system for policies and measures and projections

The national system is being prepared in joint consultation between the WG PAMs and WG projections. The national system and any changes are finally approved by the National Climate Commission.

## 1.11 Information on relevant institutional administrative and procedural arrangements for domestic implementation of the EU’s nationally determined contribution, or changes to such arrangements

The arrangements for implementing policies and measures as means of domestic implementation and to the arrangements for national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks as means to track domestic fall under the responsibilities of the different entities.

As far as the Flemish Region is concerned, the Flemish Energy and Climate Plan 2021-2030 provides the general framework for the implementation and monitoring of energy and climate policy. This plan provides for annual Flemish progress reporting.

The framework for Brussels Capital Region is established in the Brussels Energy and Climate Plan 2021-2030 and the new Air Climate and Energy Plan approved on April 2023.

In Wallonia, the Walloon Energy and Climate Plan 2021-2030 and the Walloon Air Energy and Climate Plan 2016 – 2022 (imposed by the climate decree<sup>12</sup>) provide the general framework for the implementation and monitoring of energy and climate policy. In order to optimize the monitoring and the implementation of the transversal measures of the Plan, an inter-administration working group was recently created.

To track progress, the Federal administration is conducting PAMs evaluation studies of the Federal and National Energy and Climate Plan 2021-2030 available on [www.climat.be/evaluation-PAMs](http://www.climat.be/evaluation-PAMs). A federal task force is also in place to discuss priorities, hypothesis and methodologies.

### 1.12 Description of the stakeholder engagement undertaken in relation to the preparation of policies and measures and projections

Stakeholder engagement falls under the responsibilities of the different entities. In general, it can be noted that stakeholder consultation is provided for in various ways in the preparation of new policies/policy plans, including the expected impact and projections.

For example, consultations carried out within the framework of the National Energy and Climate Plan 2021-2030 are described in the Plan.

---

<sup>12</sup> <http://awac.be/index.php/thematiques/politiques-actions/les-politiques-changement-clim/politique-wallonne>