

# Meta-review of Belgium's integrated National Energy and Climate draft Plan 2021-2030

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## Abstract

The EU energy & climate policy requests from all Member States to submit a National Energy & Climate Plan (NECP) over the year 2019, to reach the aggregate goals of energy efficiency, renewable energy supplies and greenhouse gas emissions reductions by 2030. The complicated Belgian context is briefly described. Then the many comments on Belgium's draft NECP are summarized and annotated. Commentators are the European Commission, various statutory advisory councils on energy and climate policies, NGOs, consultants, etc. The draft plan requires significant improvement for meeting the formal standards imposed by the EU framework. More problematic however are the doubts about the actual capability of Belgium to realize the paper & ink commitments. Delving into the draft NECP and the abundant comments created a growing insight that the bureaucratic NECP approach of the European Commission is obsolete and dysfunctional. For addressing the energy & climate challenges, urgent & drastic, i.e. disruptive transformation is requested. Hence, disruptive thinking, novel frameworks and approaches should prevail.

**Keywords:** energy & climate policy, federal state governance, emissions reduction, EU NECP framework & process, sustainable transition vision.

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Bold text in this article = bold text in the source documents.

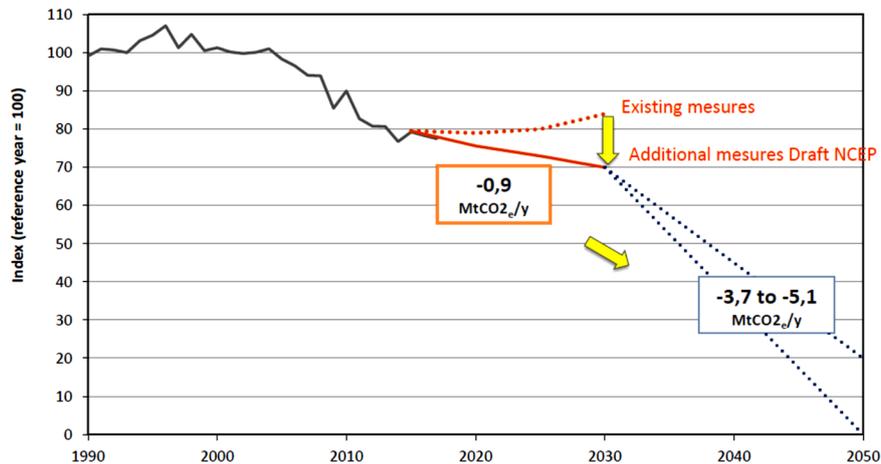
Comments inserted by the authors are in {...} brackets.

Acronyms: EC = European Commission; ENOVER/CONCERE = Belgium's energy policy coordinating platform; ETS = Emissions Trading System; GHG = Greenhouse Gas; MS = Member States (of the EU); NECP = National Energy and Climate Plan; RES = Renewable Energy Sources.

## 1. Introduction

On 19 December 2018, Belgium submitted its draft National Energy and Climate Plan (NECP) to the European Commission. In its NECP, Belgium sets out the policies and measures that will allow the country to reduce its GHG emissions by 35 % in 2030 compared with 2005 levels for non-ETS sectors. In addition, based on the measures outlined in the specific plans of the regions (cf. *infra*), Belgium pledges to generate 18.3 % of its gross final energy consumption from renewable energy sources (RES) by 2030 (compared to an overall EU target of 32%). Fig. 1 shows that the additional measures promised in the Belgian NECP are needed to curb the growing GHG emissions expected under the ‘existing measures’ scenario. However, when the additional measures in the NECP play out as promised (not being a given), much stronger emissions reductions will be needed after 2030 for being in line with the global and EU agenda to keep global warming below the 1.5–2°C range.

Figure 1 – Historical and projected GHG emissions in Belgium’s NECP



Source: Van Steenberghe (2019)

The present paper analyses Belgium’s draft NECP mainly from the governance point of view. A detailed technical and economic analysis of the many policies and measures (including their interaction) is beyond the scope of this contribution. In line with our focus on governance, we start with an overview of Belgium’s complicated institutional context (Section 2). Since Belgium’s climate policy is to a large extent determined by policy making at the level of its regional governments, section 2 also provides information about the different socio-economic contexts of the three regions (Flanders, Wallonia and Brussels). Section 3 holds an overview of the many comments and evaluations of Belgium’s NECP. The available comments are many and detailed, almost impossible to repeat them all in this article, and also making similar comments by us superfluous. Section 4 offers some reflections beyond the

present NECP framework & processes as set up by the EU Commission. Conclusions follow in section 5.

## **2. Belgium's complicated political-administrative structure**

Belgium is a country composed of three regions: Wallonia with French as common language covers the southern part of Belgium, housing a small German speaking area in the East of its territory; Flanders with Dutch (also called Flemish) as common language covers the northern part of Belgium, housing Brussels in the South of its territory on short distance of the border with Wallonia. The most spoken language in Brussels is French, with Dutch as the twin formal language. The multinational citizenship of Brussels has flooded the city with many foreign languages, with an important position for English as lingua franca in professional and exchange relations. Flemish, French and German cultural communities are officially recognized since 1980.

Before 1970 Belgium was a unitary state, with Brussels as the decision-making centre, politically, administratively and also economically, financially, even industrially. Since 1970, six successive state reforms took place, devolving more and more authority, budget and administrative capacities towards the communities and the regions, while the federal state remained responsible for un-split matters, for example the army. For exterior relationships (such as foreign trade, relationship with the EU and the European Commission), the spread of power among the federal and regional entities is varying with every case. Van de Graaf et al. (2019) describe the problematic situation this creates for energy policy as follows:

“These reforms have created a heterogeneous and intricate allocation of competences between the federal government and the three regions. National legislative acts no longer have precedence over regional and community acts. Conflicts have to be decided by the Arbitration Court. EU-directives are transposed by the national level or by the regional level, depending on their competences over the directives' substance. Table 1 depicts the division of energy competences since January 2014, after the sixth phase of state reform. In principle, the federal level is responsible for those matters that require a national approach due to their technical or economic indivisibility (Special Law of 8 August 1980). For example, the federal government is responsible for large infrastructure for energy storage (such as the LNG terminal in Zeebrugge or the natural gas storage facility in Loenhout), transport (electricity grid >70kV, oil and gas transport pipelines), and production (power plants >25MW, oil refineries) (Vandendriessche, 2017). The responsibility for renewable energy was transferred to the regions in 1988 (Law of 8 August 1988), except for offshore wind turbines (the North Sea is under federal authority), tariffs and electricity transport, all of which remain federal competences. Since 1993, the regions have been granted residual competences over energy (Special Law of 16 July 1993), which means that all issues that are not formally attributed to the federal authorities fall under the competence of the regions. The result is a very heterogeneous division of competences.

Table 1 – Division of competences for energy policy in Belgium

Federal responsibilities	Regional responsibilities
<ul style="list-style-type: none"> <li>• National indicative studies about security of supply</li> <li>• The nuclear fuel cycle and related research and development (R&amp;D) programs.</li> <li>• Large infrastructures for the storage, transport and production of energy</li> <li>• Transport tariffs and prices</li> <li>• Offshore wind energy.</li> </ul>	<ul style="list-style-type: none"> <li>• Regulation of gas and electricity retail markets</li> <li>• Distribution of electricity (electricity grid &lt;70 kV) and natural gas, including distribution tariffs</li> <li>• District heating equipment and networks</li> <li>• Renewable sources of energy (except offshore wind energy)</li> <li>• Recovery of waste energy from industry or other uses</li> <li>• Promotion of the efficient use of energy</li> <li>• Energy R&amp;D (except nuclear)</li> <li>• Use of coal-bed methane and blast furnace gas.</li> </ul>

Source: Adapted from IEA (2016, pp. 22-23)

Energy policy is further splintered horizontally. At the federal level, for example, there are separate ministries for Energy, Environment and Transport. In the 2014-2018 administration the federal authority over offshore wind energy in the North Sea was shared between an energy minister and a state secretary for the North Sea. There is a federal energy regulator, the Commission for the Regulation of Electricity and Gas (CREG), and three regional regulatory institutions: in Flanders, VREG (Vlaamse Regulator voor Elektriciteit en Gas); in Wallonia, CWaPE (Commission Wallonne pour l’Energie); in Brussels-Capital, Brugel.

The fragmentation of authority over the federal and regional levels caused the need for coordination. In 1992, the energy policy coordination platform ENOVER/ CON-CERE started. This consultative body among officials and ministerial advisers from the regional and federal level pursues cooperation on energy matters between the different levels and sorts out potential frictions. Plenary sessions are held monthly and working groups by sector have been created. Other relevant federal-regional coordination bodies include, the Coordination Committee for International Environmental Policy (CCIEP), which has a working group on climate change, and the National Climate Commission (NCC) (IEA, 2016, p. 24). By the ‘principle of no hierarchy’ the federal government cannot impose anything that falls within the competences of the regions. Hence, voluntary cooperation and negotiation are the only leverage for intergovernmental relations in Belgium.”

The self-created political-administrative conditions (also called mess, nightmare) in Belgium have a high impact on energy and climate policy, in particular on the NECP. This is one (important) explanation why Belgium’s NECP has a long way to go: the exceptionally intricate political-administrative structures with loopholes and built-in inefficiencies, such as many governments and ministers dealing with the same subject, lack of proper multi-level procedures, divisive political views and standpoints, etc.

Before treating the draft NECP itself, section 2 provides some economic and energy information on Belgium and its regions.

### *Background data on Belgium's economic and energy situation*

Observers of Belgium's political-administrative structures and practices question why the unitary state has devolved the way it was. Some explanations refer to the significant differences between the regions, which would urge a further devolution into a confederated state. In the latter situation, all power would be assigned to the regions, which would then agree which of the powers they would commonly delegate to a federal authority. Others argue for the reverse direction: the federal state would reabsorb particular competences, especially where urgent action in an international context is due. Climate policy obviously is such a case. Politics and popular opinion are strongly divided about the two ways: a fat-tailed normal distribution could represent the distribution of positions on this choice. This means that the stalemate can go on for many years.

Table 2 informs about the socio-economic situation of the three regions. Flanders is the most populous (57.6%), creating a larger share of gross added value (59.2%) than its population share. This phenomenon is stronger for Brussels (10.5% / 17.7%), due to the concentration of high-value activities in this capital of Flanders, Belgium and Europe. The unbalance is absorbed by Wallonia (31.9% / 23.1%), also revealed by the value added per inhabitant (last row in table 2). More than 3/4<sup>th</sup> of the Gross Value Added in Belgium is forthcoming from services activities, with even 91.6% in Brussels. Flanders is the most industrialized region; large-scale chemical and oil refining, also steel (Arcelor Mittal) plants are situated in the maritime industrial zones of Antwerp and Ghent. Less energy intensive industrial activities are spread all over the Flemish region. Wallonia de-industrialized by the closure of its steel plants, insufficiently compensated by growth in other industrial activities. Gross added value of the industry & energy activities, covering 16.75% of Belgium's total, are coming from Flanders (70.2%), Wallonia (23.9%) and Brussels (5.9%).

The construction industry covers 5.2% of Belgium's Gross Value Added (5.9% in Flanders, 5.4% in Wallonia, and 2.7% in Brussels; in EUR: 2/3<sup>rd</sup> in Flanders and 1/3<sup>rd</sup> in the other regions). Renovation of the buildings stock and reconstruction of infrastructures are important factors of energy efficiency progress on the low-carbon energy path.

The unbalances observed across the three Belgian regions are not spectacular, because a central capital sui generis attracts more service activities, and regions develop unequally. However, Belgium's bi-polar structure North/South, Flemish/French created a divided and opaque political-administrative system. Most contentious issues strand in protracting stalemates. However, addressing the energy transition and climate change challenges requests primarily policy and political changes and interventions.

Table 2 – Statistics on population, geography and economic activity of Belgium and its three regions Flanders, Wallonia and Brussels (data 2017, 2018)

Attribute	unit	Flanders	Wallonia	Brussels	Belgium	
<b>Population &amp; Geography (2018)</b>						
Population in numbers	million	6,553	3,624	1,199	11,3760	
Share of Belgian population	%	57,6	31,9	10,5	100,0	
Ground area + [sea area (federal)]	km2	13.624	16.901	162	30687,0	[3.649]
Share in Belgium's ground area	%	44,4	55,1	0,5	100,0	
Share of built area in total surface	%	28,3	15,2	79,8	21,4	
Population density	Persons/km2	481	214	7401	371	
<b>Economic activity (2017)</b>						Shares
Gross Value Added	Million EUR	231872	90485	69346	391704	100,00
Share in Belgium's Gross Value Added	%	59,2	23,1	17,7	100,0	
Agriculture, forestry, fishery	Million EUR	2165	725	18	2908	0,74
Industry & energy	Million EUR	46044	15692	3884	65620	16,75
Construction	Million EUR	13764	4852	1903	20519	5,24
Services	Million EUR	169899	69217	63541	302657	77,27
Share of services in regional VA	%	73,3	76,5	91,6	77,3	
Value added per inhabitant	EUR/person	35384	24968	57837	34432	

Sources: Composed by authors, based on data from National Bank of Belgium (NBB 2019<sup>a</sup>, 2019<sup>b</sup>)

### 3. Commentaries and evaluations of the Belgian NECP

This section consists of three parts. First we provide a selection of commentaries on the Belgian NECP written by statutory institutions, i.e. the European Commission (section 3.1) and Belgium's statutory advisory councils on energy & climate issues (section 3.2). Next we provide assessments and comments by NGOs and think tanks (section 3.3).

#### 3.1. The European Commission assessment and recommendations

The EC published three documents per June 18, 2019 on the MS draft NECPs: Factsheet, Assessment, and Recommendation. The Factsheet (EC, 2019a) is mostly informative, as it should be. However, it is also called a 'Summary of the Commission assessment of the draft NECP', and includes evaluative formulations, such as 'a low level of ambition' on energy efficiency projections, or 'this could be explained in more detail' on energy security, 'more attention could be given to' to the desired outcomes of research, innovation and competitiveness, etc. A pure factsheet avoids adding commentaries that remain rather partial and incomplete.

The Assessment (EC, 2019b) holds the most extensive comments on the draft NECP. The document is publicly available, and therefore only a few salient points are mentioned here. On the GHG reduction policies and measures the EC observes its 'shopping list' character by stating 'information on their specific contribution to the GHG reduction target and on their exact scope, status and timeframe is often lacking', and 'whether they are merely a description of a potential avenue, or an actually proposed and confirmed measure' (EC, 2019b: 6). On renewable energy deployment more information is requested, such as 'an **indicative trajectory** for the overall renewable

energy target at national level for the years 2022, 2025 and 2027' (EC, 2019b: 7). On research, innovation and competitiveness the EC asks 'more precise **objectives**' (EC, 2019b: 11). The EC mentions the construction of MYRRHA, an experimental molten lead research reactor, without any comments. On this issue, the Commission could for instance point out the absence of other EU Member States (MS) partners in the MYRRHA project, or ask for more details on how this particular R&D activity fits into Belgium's overall climate and energy strategy for 2050. On research funding, 'there is need to clarify which portion of this would be dedicated to energy and climate matters'.

Belgium is praised for the significant efforts it did for aligning its four governments in the preparation of the draft NECP. The EC nevertheless remarks that the draft NECP does not fully corresponds to Belgium's recently agreed Inter-federal Energy Pact (setting out climate and energy policy targets and ambitions for 2050), which should be taken as a logical starting point. The national NECP is correctly described as an assembling of draft plans made by the various 'entities' (three regional governments and the federal government). The EC (2019b: 12) finds: 'As it stands, the draft NECP often presents a summary of information contained in the annexed plans, without always demonstrating how the different elements presented are combined into a common vision on how to ensure the transition to a low carbon society in Belgium. (...) Substantial effort and political willingness are therefore needed to achieve a more integrated NECP.' This comment points to essential attributes of strategic planning, such as 'vision', 'transition', 'integrated'.

The EC (2019c) offers 10 Recommendations to improve Belgium's NECP, with its headlines summarized as:

1. Better information on the policies and measures and on the intended use of flexibilities.
2. Significantly raise the level of ambition on renewable energy deployment, and be more specific about the planned growth trajectories.
3. Increase the energy efficiency ambition.
4. Identify the measures supporting the energy security objectives.
5. Clarify national objectives and funding targets in research, innovation and competitiveness.
6. Intensify regional cooperation in the Pentalateral Energy Forum.
7. Quantify and specify investment needs.
8. List and phase out fossil fuel subsidies.
9. Analyse and quantify interactions with air quality policy.
10. Better specify and integrate justice, fairness and energy-poverty aspects.

The purpose of the EC seems to streamline the NECPs into the frame designed by the EC and in compliance with the EC's body of policies and regulations (for example on energy, internal market, the Energy Union, climate policy, EU's Emissions Trading System). Overall, the EC recommendations spur to higher ambition levels and to significantly more clarity and quantification about policies and measures, investments and financing. The EC refrains from being too critical and from using quantitative measurement of the distance between the draft NECP and a really workable, verifiable, and trustworthy NECP. In section 4 we set out our view that deeper delving in the energy transition challenges exposes also the NECP frame as such. A further elaboration of an alternative transition governance frame is evidently beyond the scope of the present paper.

### 3.2. Evaluations by Belgium's statutory councils

Parallel to the many governments established in Belgium, a wide range of advisory councils were installed in the domain of the various competences of those governments. Fortunately for this review seven councils agreed to a common advice on Belgium's draft NECP besides the own advices, although the first comment states that the common advice is mainly focused on **the aspects of governance**. The Federal Council on Sustainable Development (FRDO/CFDD) coordinated the common advice (FRDO 2019), with as participating councils [with their membership]:

1. CRB = Central Council on Industry [business federations and trade unions], active at the Belgian federal level
2. SERV = Social and Economic Council of Flanders [business federations and trade unions]
3. MiNaRaad = Environmental and Nature Council of Flanders [environmental NGOs, socio-economic organisations, spatial planning organisations, consumer organisations, organisations representing cities, municipalities and provinces, independent experts]
4. CESE Wallonie = Economic, social, and environmental council of Wallonia [business federations, trade unions, environmental NGOs]
5. ESRBHG = Economic and social council of the Brussels' region [business federations, trade unions, social profit sector, organisations representing the self-employed]
6. RLBHG = Environmental council of the Brussels' region [environmental NGOs, business federations, trade unions, organisation representing the self-employed, universities, independent experts, consumer organisations, administration]

The critical comments in the common advice are as follows:

- Significant shortages in the preparation, implementation, and monitoring of energy and climate policies.
- Processes of consultation {we assume the text refers to the councils} and scientific research are insufficiently used by some policy levels.
- Objectives and measures of the various policy levels lack integrated, systemic vision, and are not matching, inter alia in following domains: environmental tax law, sustainable mobility, planning of infrastructures for the transition to a low-carbon society, and financing.

Firm statements of the collected councils are:

- The present institutional framework allows a far better performance.
- The present draft NECP reflects structural shortages, flaws and provides few remedying suggestions.

Critical comments continue:

- The draft (NECP) is a juxtaposition of various plans of the federal and regional governments, with a limited synthesis of the separate plans.
- A real consolidated plan is not available.
- The juridical and political status of the draft NECP is unclear, because of the different ways the various governments approved their sub-plans.

Recommendations are as follows:

- The councils insist the governments should take into account the councils' advices and the assessment and recommendations of the EC.
  - The final NECP should be fully conform to the framework prescribed by the EU.
- Three additional comments:
1. Sector objectives are not sufficiently followed by clear measures and necessary human and financial capital supplies. Some sectors and people need support for participating in the low-carbon transition.
  2. The attention for the five Energy Union dimensions is unbalanced.
  3. The final NECP should be a clear, accessible document (better tables and summaries). It would benefit citizens and stakeholders {and reviewers}.

The councils also insist to create a process along the improvement of the draft NECP, to obtain an agenda of cooperation – with respect for the specific competences of the policy levels and their complementarity. This process could develop to a lever for solving structural problems of cooperation. The councils want to be involved in this process. {How this could be set up practically is not specified; as reviewers we label this important point more as a wish than a real proposal}.

Section 3 of the advice addresses the question “What is needed to properly implement the NECP?”

- First is observed that a stronger NECP is no guarantee for a structurally better policy on energy and climate. The councils emphasize the necessity of a **cooperation agenda** (among the many Belgian policy levels and authorities).
- Second, a clear, tuned and deliberated **research agenda** about issues of energy and climate policy, but also strengthened research in relevant technological and societal innovations.
- Third, the need for **improved processes of consulting** with better agendas at the various policy levels.
- Fourth, the implied governments should clearly express their choice for a **structural process of sustainable development**.
- Fifth, **find ‘accelerators’** on essential points for stimulating the transition with multiplying effects. This is followed by lists of specific points, such as environmental taxing, sustainable mobility, innovation support, integrated planning for infrastructure, integrated data management and exchange.

Somewhat additional to the five ‘needs’, the advisory councils call for a ‘National conference about the fair transition towards a low-carbon society’, and conclude with a list of **concrete recommendations** for better governance, such as: clear procedures about NECP, sensitization of citizens and firms, more transparency of political and administrative institutes, circular materials cycles, exemplary role of public authorities, coordinated energy and climate policy for the building sector, rigorous product standards effectively controlled and enforced.

The common advice of seven statutory advisory councils focuses on governance aspects, as summarized above. Adding boring overviews of the seven separate advices would dilute the focus on the crucial, painful state of politics and governance in Belgium and its regions.

The mere existence of seven statutory councils advising on energy and climate policies is a show trough of Belgium’s intricate political structures. Spreading the scarce time, financial, and human expertise resources over seven advisory entities is questionable. Redundancy is a cost. Often the same organisations and the same people

occupy seats in several councils. The outcomes of the well-intended reflections and long deliberations are mostly overlapping and comparable. Similar biotopes on similar substrates deliver similar results. This generates complacency and a lack of disruptive analysis, daring propositions and maverick creativity. Long-standing and outgrown bureaucracies adopt complacency as normal habit. Expectedly it is also spread in the directorates of the European Commission.

### *3.3. Evaluations by non-statutory civil society organisations.*

For the European Climate Foundation, two consultant companies Climact and Ecologic Institute (2019) executed a fast evaluation of the NECPs of EU's member states. They developed a 100 points scorecard on three main indicators, with each indicator composed of sub-indicators: Target adequacy (45 points for 5 sub-indicators), Policy details (45 points for 5 sub-indicators), and Process quality (10 points for 2 sub-indicators).

In total, Belgium scored 29.3 points, at place 14 (the middle of the ranking of the 28 EU member states). Spain was first with a score of 52.4 points. Germany at the 26<sup>th</sup> position scored 12.5 points (with a zero score for its renewable energy targets!). From the scores, it seems obvious that the scoring is only based on NECP paper & print ink. Real progress and realistic expectations on the three essential indicators: GHG emissions reductions, renewable energy deployment, and energy efficiency status and progress, seems not considered.

Belgium obtained three zero scores on (not-) setting 2030 targets for the three essential indicators, a sequel of its political-administrative functioning: one region not accepting suggested numbers blocks the plan from uploading the (varying) intentions fostered by the respective entities. Contradictory to this score, the NECP Belgium fact-sheet published by the EC (2019a) states: 'Notably, Belgium has reported clear national contributions for 2030 for GHG emissions reduction, energy efficiency (final and primary energy consumption), and renewable energy.'

From an academic perspective the Climact-Ecologic report lacks the essential features a reliable evaluation should own. Hasty, superficial and non-essential evaluation seems worse than no evaluation at all. It makes a mess of the evaluator efforts reviewing the already messy NECP process.

The 'Climate Action Network Europe' (CAN Europe) – a network of EU environmental NGOs – has published an independent high-level review of EU member states NECPs focussing on the substantial aspects of the plans – i.e. monitoring real progress and realistic expectations for reaching the promised targets (CAN Europe, 2019). For Belgium, CAN Europe (2019: 11) observes that the proposed targets for 2030 imply a "challenging shift from the business as usual". The following 'key issues and recommendations' are highlighted:

- Setting a coherent plan of action across the country.
- Boosting concrete action on renewables and energy efficiency, for instance by better spatial planning for onshore wind with more citizen participation, certainty on the profitability of solar panels and a more proactive approach on the phasing out of fossil fuels for heating.

- Planning for a real mobility shift towards only allowing zero-emission vehicles by 2030.  
As reviewers we appreciate CAN's report and their focus on a limited number of salient issues.

#### 4. Reflections beyond the NECP frame & process

Instead of repeating the many justified criticisms published about Belgium's NECP and of adding some more nitty-gritty comments, this review is ended with a reflection about and beyond the EU Commission's NECP frame & process. Becoming more familiar with the NECP approach learned this approach to be too little too late for the urgent & drastic (Stern, 2006) interventions necessary for halting societies slipping in funnels of irreversible losses of indispensable human life-support systems on earth.

Decision-making and action now have to be made in a tightening context, calling for rapid and structural transformations of energy systems, land use, the built environment, urban planning, the transport system, industrial sectors, and consumption patterns. Equally important, the urgent and drastic transformation needed will depend on the actions undertaken by millions of actors (ranging from individuals and households to multinational firms). This reality forces governments (at all levels) to understand the logic of the 'rules of the game' that influence each of these actors in their daily practices, and focus government interventions on those 'leverage points' where the most impact on actual activities and practices can be achieved. From this perspective, and compared to the traditional government logic of policy planning and relying on a mix of traditional policy instruments (such as providing financial incentives, stimulating green entrepreneurship, creating markets for low carbon innovations) the attention must shift to dominant cultures and practices (such as the way of investment decision-making with contentious discounting practices, energy and climate awareness among citizens, etc.).

The toolkits and practices of traditional policy planning (inherent also in the NECP logic) as a combination of forecasting events, exploring alternatives, and assessing the outcomes of (event, alternative) couples, becomes increasingly precarious when taking into account the complexity of the operational decision context of a thorough sustainability transition. Old-style strategy and policy planning components and tools are still useful to study partial issues and find feasible solutions. One example are the standard three iterative strategy development steps: reporting the present state and expected situation when no further action is undertaken (also emphasizes the sense of urgency); setting goals (reflects the necessity of drastic changes); designing actions to meet the goals (Winsemius, 1987; VROM, 1989; Verbruggen, 1995). In 2017, UNFCCC COP23 promulgated these established steps as 'Talanoa dialogue'. However instructive, proven and important, the old-style planning assets have been, they no longer suffice for facing today's challenges in energy and climate politics and decision-making in the public case, neither for private corporate strategic management. The multinational corporates invest in strategic analysis for continuous improvement, illustrated by following extracts from an MBA textbook: 'The strategic management process is the full set of commitments, decisions and actions required for a firm to achieve strategic competitiveness (...). Analyzing its external environment and internal

organization to determine its resources, capabilities, and core competencies – the sources of its ‘strategic inputs’ – is the first step the firm takes in this process. With the results of these analyses at hand, the firm develops its vision and mission and formulates its strategy’ (Volberda et al., 2011: 9). ‘A key purpose of vision and mission statements is to inform stakeholders of what the firm is, what it seeks to accomplish, and who it seeks to serve. Vision is a picture of what the firm wants to be and in broad terms, what it wants ultimately to achieve’ (Volberda et al., 2011: 22). The vision of a corporate determines its ultimate ends and future paths. It is stated ahead of specifying the mission and ahead of the numerous commitments, decisions and actions. The vision formulation considers the corporate’s future identity, resilience, even survival. ‘Grounding the strategic management process in ethical intentions and behaviors increases its effectiveness’ (Volberda et al., 2011: 38).

Also in the public domain, setting goals needs to be preceded by a clear vision and by leadership for directing multitudes of diverse people, opinions, intentions, and activities. Reporting the present state must include a diagnostic analysis of barriers (in relevant domains such as knowledge creation and diffusion, necessary resources to effectively perform, negative and positive regulations, incumbent interests, etc.) blocking progress in realising the policy vision.

#### 4.1. Vision and leadership

Analysing Germany’s generally recognized role as a ‘climate leader’, Cheung, Davies, and Bassen (2019) point out a strong policy vision and consistent leadership as crucial enabling factors for the energy transition (called *Energiewende* in Germany). Notwithstanding the fact that within a 35-year time period Germany has witnessed considerable shifts in government ideologies from centre-right to centre-left, climate and energy policy has remained remarkably consistent. As more thoroughly explained in Haas (2019), this outcome can be attributed to Germany’s long corporatist tradition, established federal procedures and the legislative body enjoying a strong position relative to the executive power. These features tend to generate a higher degree of deliberation, broader compromises and a higher reliability of the policy outcome, further strengthened by Germany’s comparatively stable economic development in the EU context. Furthermore, the *Energiewende* also plays an important role in Germany’s industrial and export strategy with German industry still heavily involved in the construction and development of renewable energy technologies (notwithstanding the collapse of solar cell production in 2013). Germany’s strong position on the global renewables market was carefully built up starting with the creation of a domestic market. The main instrument to support the construction of this internal market has been the Renewable Energy Act (*Erneuerbare Energien Gesetz, EEG*), enacted by the German parliament in 2000 (Haas, 2019). The law guarantees priority feed-in for renewable energies and a fixed remuneration per kilowatt-hour produced for a given period (mostly 20 years). Combined with a strong and active involvement of a ‘green’ civil society (dating back to the major environmental and anti-nuclear movements that emerged in the 1970s), this led to the development of a decentralized energy system with diversified ownership (local cooperatives, municipal utilities, etc.), which decreased the stronghold of traditional centralized electricity generators. However, in

2014 the EEG was amputated and excluded further use of feed-in tariffs as major vehicle for RES expansion. Forces opposing a fast, decentralized *Energiewende* fiercely attacked the EEG, blaming renewables as too expensive in terms of short-term consumer costs (Haas, 2019). Verbruggen et al. (2015) reveal the link between the EEG amputation and the restoration lobbied by incumbent energy companies in the EU energy market (united in the so-called ‘Magritte group’). The EU Commission’s new state aid guidelines of 2014 enacted and promulgated the restoration wanted by the incumbents.

Belgium lacks strategic vision and leadership. “A major part of the explanation for Belgium’s weak performance is the dominant role of energy corporates in the Belgian energy sector. Before 1989 it was the SGB holding with Tractebel and its power and gas companies. [...] Clearly, an overarching energy vision could help to overcome the divides between the various authorities while making Belgium fit for a more sustainable future. In 2018, the Belgian federal and regional governments concluded an ‘Energy Pact’ covering the general strategic directions and goals of energy transition policy in the coming decades (Belgian Federal Government, 2018). As such, the ‘Energy Pact’ mainly sets out the governments’ intentions and does not include any details on the policies and measures to be implemented in light of the ambitious transition goals.” (Van de Graaf et al., 2019).

In 2003, a federal law enacted the phase-out of Belgium’s nuclear power plants (NPPs), stipulating the closure of every Belgian NPP after 40 years service. Life extension of NPPs is contested and generating major policy uncertainty. Several policy reversals occurred. For the time being, the closure of all NPPs is foreseen over the period 2022-2025. However, the May 2019 elections confirmed the political party N-VA as strongest party in Flanders and in Belgium. N-VA is in favor of maintaining 2GW nuclear capacity operational after 2025. Doubt is a major impediment for investing in new generation capacity.

The lack of vision of the Belgian government is matched by a lack of leadership at the EU level, as evidenced by the ‘climate leadership scoreboard’ (Climate Market Watch and Transport & Environment, 2017). In the run up to the Environment Council of June 2017 on EU’s Effort Sharing regulation, the country positions in the negotiation process were analyzed and ranked. Five key elements of the initial EC proposal for effort sharing were selected for the ranking: i) the starting year from which the emission reduction targets are applied; ii) how carbon sinks in the land use and forestry sector are addressed; iii) whether surplus permits from the EU ETS can be used in meeting the targets for non-ETS sectors; iv) the governance system to ensure countries comply with their targets; and v) whether the ambition level of the 2030 and long-term targets is compatible with the Paris Agreement objectives. Sweden, Germany and France emerge as the top 3 climate policy leaders in the EU. With 21 points out of 100, Belgium lands exactly in the middle (13<sup>th</sup> place). Carbon Market Watch and Transport & Environment (2017: 11) conclude that Belgium “...loses points for not yet wanting to limit the land use and ETS surplus loopholes and for advocating for a starting point that rewards countries for underachieving. The country is currently not planning to go beyond its domestic 2030 target of 35% emission reductions nor has it set an adequate long-term target.” The only positive comment they have is that “...Belgium scores well because it is open to having more frequent compliance checks by the EC.”

#### *4.2. Diagnosis of barriers*

From strategic vision and leadership follows visible political action. Deploying initiatives faces barriers, requiring clear diagnosis. This is not a simple description of the present situation and a few expected trends. Profound understanding of the operational decision context facing actors in their energy-related practices precedes actionable knowledge about effective government interventions for creating ‘leverage’ in contested decision contexts. A good diagnosis is very situated and adapted to functional energy demands by energy service, (such as high-temperature heat in industry, person and freight mobility, low-temperature heat for space heating, etc.), different sectors and sub-sectors (such as social housing, rental buildings, public buildings, privately-owned buildings, offices, etc.), socio-economic realities (for example, low- vs. high-income households). Laes et al. (2018) performed a diagnostic analysis for the Flemish energy system, exemplified here for one functional type of energy use, i.e. low-temperature heating and cooling in the built environment. The major challenge is the rate of energetic renovation of existing buildings, which in previous years varied between 0.5% and 1%. The energy transition requests at least a doubling of the rate. Then, the remaining demand for low-temperature heat should be covered by sustainable heat sources. In principle there are three options: heat networks (fed by residual heat from industry or sustainable sources, such as sustainable biomass or geothermal energy), the ‘all-electric’ solution (heat pumps), or individual heating based on sustainable biomass. Vision formulation and strategic policy (with a key role for local authorities, following the principle of subsidiarity) should answer the question which type of heating (and cooling) infrastructure is desirable and feasible specifically for various Flemish neighbourhood types.

### **5. Conclusions**

This review of Belgium’s draft NECP holds two parts. First, the NECP is reviewed with adoption of the framework (straightjacket) set up by the European Commission. Second, the latter framework itself may be the subject of developing learning about policy planning and decision-making in a climate change reality requesting urgent and drastic action.

Our weighing of what Belgium’s draft NECP delivers within the framework set up by the European Commission is mostly in line with reviews and comments published by other sources, such as: the European Commission itself, the various statutory advisory councils, and environmental NGOs. One exception: the report by Climaact & Ecologic Institute is assessed as too poor for further consideration.

The overall observation about Belgium’s NECP is the significant distance between ‘what is’ and ‘what should be’. Juxtaposing the separate contributions of the four “entities” (Flanders, Wallonia, Brussels, Federal government) to one text does not result in an “integrated” plan. The draft plan constructs sentences for answering the various items of the EC framework, and formally succeeds in printing enough acceptable text. However, it remains opaque how intentions on paper will be converted in effective actions and outcomes. The more detailed and extensive the NECP draft text and the many commentaries on it are studied, the more evidence is growing

that the full endeavor faces a high probability of failure and collapse – eventually suffocation in a bureaucratic swamp.

By its self-created, utterly complicated political-administrative structures and anomalies Belgium is an easy victim for critics. However, the framework of the EC is akin to old-style policy planning, with superficial inventory of the actual (physical, economic, administrative, political, etc.) situation, distant goal setting (beyond the time in office of present politicians), shopping lists of measures, instruments, finance, ... all running by itself in policy dreamland. For not throwing the baby out with the bathwater, old-style planning holds useful tools, but climate change emergency requests more disruptive thinking and action for immediate kick-start. Because we are but reviewers and not advisors, and because the design of a comprehensive alternative approach cannot be summarized in a journal article, only a few points about vision, leadership and problem diagnosis are mentioned. Exploring the ongoing debate on sustainable energy transitions and transformations (Cherp et al., 2018), and distillation of disruptive recipes are highly recommended.

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