



Minutes of Task Force Scenarios - Workshop 1: storylines 17/09/2021

Meeting				
Date	17/09/2021			
Organiser	Elia			
Participants			Attended	Excused
Anciaux Pauline		FOD		\square
Boisseleau Francois		Engie		
Bontems Olivier		Ideta		
Canière Hugo		BOP		
Carnier Marc		Engie		
Claes Peter		Febeliec		
Cornelis Erwin		BBLV	Π	\square
de Changy Maxime		Fluxys	\square	
Debrigode Patricia		CREG		$\overline{\mathbf{X}}$
Herbreteau Sarah		CREG	$\overline{\boxtimes}$	
Heylen Benjamin		FOD		
Holtrup Hans-Jurgen		RWE		
Lachi Simon		RESA		
Laleman Ruben		Engie		
Maréchal Thomas		FOD		
Monami Eric		Edora		
Piret Alain		Sibelga		
Robbelein Jo		FOD		
Schjelderup Ina		RWE		$\overline{\boxtimes}$
Van Bossuyt Michael		Febeliec		
Van Damme Kathy		VEB		$\overline{\boxtimes}$
Vandeburie Julien		Resa		
Vazquez Juan		Fluxys		
Verboomen Jody		Siemens Energy	$\overline{\mathbf{X}}$	
Verhelst Clara		CREG		
Waignier Jean-Francois		Febeg		
Wehenkel Thomas		Resa		
Vander Mynsbrugge Jorrit		Elia		
Huertas Hernando Daniel		Elia	\square	
Feito-Kiczak Rafael		Elia	\square	
Pirlot Yunus		Elia	\square	
Luca Florence		Elia	$\overline{\mathbf{X}}$	

Report

Author	Jorrit Vander Mynsbrugge			
Function	Secretary of the Task Force			
Date report	23/09/2021			
Status	Draft	Final version		



0. Welcome to the Task Force

As substitute for the chairman, who was unable to attend this meeting, Jorrit Vander Mynsbrugge, secretary of the Task Force has opened the meeting. Elia organized the workshop as a physical meeting in the Nhow hotel in Brussels to stimulate discussions and co-creation. The workshop started with a short introduction of everybody (name, company & function).

Elia presented the agenda as shown below. The workshop was divided into two parts. The first focused on exposition whereas the second was meant for discussion.

Start	End	Timing	Торіс	
13:00	13:10	00:10	Welcome to the workshop	
13:10	13:20	00:10	Feedback Received on "call for evidence"	
13:20	13:35	00:15	General methodology on storylines creation	
13:35	13:55	00:20	Overview of TYNDP scenario report	
13:55	14:15	00:20	Coffee break	
14:15	14:30	00:15	Introduction to key questions & drivers for Belgium	
14:30	15:30	01:00	Brainstorm & discussion about drivers for national sensitivities & variant storylines around the TYNDP storyline	
15:30	16:00	00:30	Feedback + QA	

Elia gave a short reminder of the planning for the remainder of 2021.

The next Task Force of 24/09/2021 will also take place in the Nhow hotel in Brussels, Elia asked to give feedback after the first workshop about the location of the Task Force, to be taken into account in the next years.

1. Formal Approval Minutes

Elia asked if there were comments on the meeting minutes that were distributed after the kick-off meeting of 18/05/2021.

Comments: no comments

The minutes of 18/05/2021 were approved and are published on the Elia website.

2. Call for evidence

Elia gave a short overview of the feedback that was sent in on the "call for evidence". The feedback of FEBEG was integrated in the Elia presentation. The feedback of Fluxys will be presented in the next workshop, as it relates to flexibility in electricity demand.

Comments: FEBEG confirms that what was presented by Elia represents the feedback given by FEBEG.

3. General methodological introduction

Elia gave an overall explanation of the methodology. This was an introductory repetition of the kick-off. See accompanying presentation.

Comments: no comments

4. Overview of TYNDP 2022 storylines

See accompanying presentation.





Elia gave an explanation of the TYNDP 2022 and its approach. Elia clarified that to her knowledge the publication of the final TYNDP 2022 scenario report is expected in Q1 of 2022. More information can be found on ENTSO-E/G websites. A public consultation on those scenarios is also expected in the coming weeks.

The methodology to define storylines proposed within the task force follows the same logic as the one used within the TYNDP process.

Elia explained the 'storyline matrix' that is used for the TYNDP as it will be used as basis for the brainstorm / discussions later in the session.

Comments:

BOP raised a question on how to treat the target and how far we want to go? Do you make different storylines or integrate different ambitions within your storylines?

Elia responded that it depends on how big the impact is: if the impact is small, you make a sensitivity on an existing storyline, if the impact is big or if more than one impact is assessed, a variant storyline can be defined.

Siemens Energy asked for what the scenarios that are established in this Task Force will be used. It is unclear to them as in this workshop Elia proposed more than one storyline while in the Adequacy and Flexibility study, only one storyline was used.

Elia answered that the exercise here is used as input not only for the Federal Development Plan, but that it will serve as a basis for all studies within Elia. Elia notes that it is important to frame the purpose and use of these scenarios. On the "short term" (up to Y+10), one scenario is used such as Adequacy and Flexibility, where we work with a large amount of sensitivities. On the longer term, different storylines are defined.

On the process of establishing scenarios, Fluxys inquired how the input of this workshop would be taken into account?

Elia clarified that an iterative approach is needed. The goal of this task force is to get an input on the storylines for Belgium. Elia will use the input from this task force on the storylines as input for the scenarios creation process. The outcome will then by published for public consultation. The goal is not to find an optimal solution, but to assess different future scenarios. The focus for this workshop thus becomes providing input on the storylines (do they capture the desired spectrum, or are Belgian-specific variant storylines or sensitivities desired?) and on the drivers (which are of great importance for Belgium, which are not?).

Engie argued that for technology, for example, cost assumptions should also be taken into account and a decision based on cost should be taken.

Elia clarified that the goal is a set of scenarios that are diversified enough so the needs of infrastructure can be identified in order to not lag behind with regards to cost optimization. Cost could be added as an additional dimension. It is important to note however that the underlying assumptions on costs might be subject to significant uncertainty, both from policy (subsidies, taxation) and technology (efficiency, supply chain) especially for long-term scenarios.

5. 2040 & 2050: introduction to key questions & drivers for Belgium

As an introduction to the brainstorm, Elia explained that the scenario framework depends on various drivers. The framework needs to be determined for different timeframes (2030, 2040, 2050) and there are increasing uncertainties going further into the future. The focus of the Task Force this year is 2040 - 2050.

The questions that needed to be discussed in the brainstorm are:

- First: are there sensitivities we need to add for Belgium in comparison to the TYNDP scenarios?
- Second: are there variants that we need to add in comparison to the TYNDP scenarios?

To start, Elia gave an estimation of wind and PV potential, given that this potential is the maximum value that can be used within the framework but are only given as indication.

See accompanying presentation.

Comments:





Febeliec questions the relevance of potential in the analysis. Febeliec believes that investments will be driven by costs or policy and considers the focus of Elia on potential not to the point as any chosen/calculated value for potential will only provide an estimate of an upper limit or cap for any technology without providing any additional added value for the modelling itself.

Edora did not agree with Febeliec. They think that knowing the potential is an important part of understanding how realistic your assumptions are. In addition, they do not agree that cost is the only driver, as one should consider societal impact, policy...

Elia argued that potential is a way to have a scenario that will not surpass a limit that will never be realised. You need to know what your potential supply is in different regions.

6. Brainstorm / discussion about possible national sensitivities & variant storylines around the TYNDP storylines

Elia asked the members to divide into groups, preferably separated from their direct colleagues, to discuss / brainstorm about the storylines. A handout is distributed as a guideline.

Group 1: Engie, Fluxys, Siemens Energy, FEBEG Group 2: BOP, CREG, FOD, Edora, Elia Group 3: Engie, Elia, Fluxys

7. Feedback Q&A

Based on the brainstorm / discussions held in the groups, the members had one representative present the main points that were discussed. Elia informed the members that they can send in additional remarks and concerns after the workshops.

Group 1

Group 1 highlighted what they thought could be big uncertainties for Belgium. The two main groups are 'energy intensity' and 'disruptive technologies'. More in detail, they covered the following game changers:

- The level of renovation rate
 - Renovation is very important: the question is whether Belgium is going to stay a 'bad student' or that the standard will be raised.
 - Energy demand of buildings:
 - An uncertainty is the demand of energy for buildings. Technological smart solutions based on deployment of HPs and EVs linked with PVs will have a large impact.
- <u>Transport</u>:
 - One major shift is the share of people that have a car or will use their car or shared vehicles / public transport.
- Big transport
 - Belgium is very important in Europe as a transit country, so any technological revolution will have a huge impact on the energy demand in Belgium. (E-trucks, green-gas trucks, hydrogen trucks...)
- Industry
 - The share of industry demand is very big in Belgium, in comparison to other demand sectors. The technological evolutions will have a big impact in Belgium (e.g. electrification of feedstocks).
- Shipping
 - Same story as for industry: the way shipping will evolve (technological evolutions) could have a big impact.
- P2X:
 - Disruptive technologies could be game changers.

Elia raised a question, based on the summary given by group 1: There is a lot of emphasis on technologies and technological evolutions. Are technologies underrepresented in the current scenarios? Should there be a 'tech+' variant taking the impact of technological evolutions even further?





Group 1 confirmed that this could indeed be interesting. The evolution of the demand in different sectors is very important. Another idea might be extreme scenarios: all electricity, but extremely efficient; all gas, but extremely wasteful.

Group 2

Group 2 identified that <u>globalization</u> can have a big impact. The question "*how self-sufficient do we want to be?*" could have a huge impact on European industry and by consequence energy demand. Group 2 remarked that there is no driver "globalization" in the current framework.

Secondly, they felt that both scenarios are very opposite and extreme. It might be a good idea to have a 'softer' central storyline. One way to do this could be the continuation of national trend, further into 2040 / 2050.

Lastly, this group experienced a lack of detail in "green transition" driver in TYNDP scenario matrix. They felt that some drivers are much more detailed than others; e.g. why could 'green transition' not be split up in different sections (resource efficiency, circular economy, ...)? The only split in green driver is 2030 vs 2050, why not split in its own categories like what is done for 'technologies'. Where will the green transition come from?

Engie agreed with this, E.g. the 'fit-for-55' target is further split on requirements and expectations for the different categories of drivers mentioned in the workshop (i.e. further detailed at the level of impact for technologies, energy intensity choices, etc...).

Group 3:

This group argued that the green transition is set to 'yes' without differentiation between both scenarios. This might not come to fruition. While it might not be politically correct, it could make sense to differentiate scenarios on whether the political ambitions are met.

- Consider a 35% storylines-scenario (behind target) and a 65% (above target)
- And / or different speeds to reach the 55% target: lot of effort now or in the future, closer to 2030.

Siemens Energy agreed with Engie, but the question they have is if defining a -35% scenario would be useful?

Engie replied that they believe it might be insightful to do a 'Business as usual'-scenario and see where we end up, e.g. with respect to reaching or not political ambitions and climate targets.

Siemens Energy responded that it might be important to keep in mind what we use the scenarios for: to set a political framework or to plot reasonable futures.

According to these stakeholders, taking for granted *e.g.* the assumption of reaching the climate targets for all scenarios, could be challenged and deviations from these assumptions might be useful in the development of storylines & scenarios.

Lastly, group 3 argued that in their opinion the following are the most important drivers that will affect Belgium's energy system:

- Import
- Social acceptance considerations in the scenarios
- Grids should not be developed for peak conditions only

Elia responds that for high voltage electricity transmission planning (TSO-e) dimensioning the grid only on peak demand is no longer the case as the CBA is based on multi-criteria where adequacy is not the only driver whilst for low voltage Electricity distribution (DSO-e) and Gas distribution (TSO-g) this might still be the case.

8. Closing the meeting

The secretary presented a recap of the feedback received:

- Reservations towards implementation on potentials & technological differentiation.
- DE / GA storylines are rather black & white, maybe there's an in-between scenario
- Green ambition: there might be a need for more differentiation, like for the other drivers
- It is important to clarify how the scenarios are related to the different studies.



The secretary thanked all present for their active participation and interesting discussions and hopes to see the task force back together on the second workshop on 24/9.

9. After action review

The session took 30 minutes longer than planned. Elia will take this into account when reviewing the process.