ENTSOs consultation TYNDP 2022 Scenarios

A Eurelectric response paper

December 2020

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:
- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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KEY MESSAGES/EXECUTIVE SUMMARY

- As a general comment, the quality of the report has improved compared to the one for the TYNDP 2020. ENTSOs are providing more explanations on the way to develop the storyline and are also clearer in the different concepts used. However, there are still room for improvement with regards the definition of the scenarios, and the matrix provided to illustrate the storylines which is hardly readable.

- Eurelectric considers that the proposed storylines provide two stress test cases: on one hand, Storyline "Distributed Energy" which is extremely decentralized and based on an utmost focus on "self-sufficiency" and, on the other hand, "Global Ambition" which depicts a strongly centralized system biased to gas. While stress tests can be of interest to assess the resilience of the energy infrastructure, Eurelectric believes that none of them describes what could be the most probable scenario, which will likely be a combination of the two proposed scenarios.

- Nonetheless, Eurelectric considers that the narrative of the scenarios should be neutral, as both are subject to similarly strong hypothesis on technology development and both lead to very different infrastructure deployment to assess through a CBA and that the debate between "self-sufficiency" and market/imports opening is currently inexistent in the EU.

- Following the publication of the structural and implementing strategies of the Green Deal (*cf.* Energy System Integration, Clean Hydrogen and Offshore renewable Strategies), Eurelectric would appreciate further explanations on how the proposed scenarios for the TYNDP 2022 aim to fully take them into account.

- Eurelectric noticed substantial missing pieces in both storylines such as traditional technologies like hydro power plants, hydro pumped storages. These technologies constitute possible flexible power assets in addition to others that are not mentioned as well (such as gas-fired power plants, batteries, and others new storage solutions, fuel cells, flexible CHP, Demand-Side Response, smart charging, as well as additional interconnectors to utilize cross-zonal and cross-commodity flexibility and to meet the electricity demand in these situations). In this sense, only a serious CBA assessment, carried out in a coordinated way between power and gas TSOs when relevant, can illustrate the implications on infrastructure costs for each scenario and give orientations to the regulatory measures and incentives to take.

1 to 3. Identification questions
Not relevant

4. ENTSOE and ENTSOG organised a webinar on July 3 2020 to introduce the TYNDP 2022 Scenarios.

- **Did you attend this webinar?** **YES** **NO**

- **Do you feel this webinar provided sufficient information about the aims of the Scenario Building Team and the scenario-building process?**

COMMENT:
Eurelectric has followed the TYNDP process very closely since its beginning and our Association has committed in the meetings and discussions organized on this until then. Being closely involved in the process, the information presented during the webinar organized in July 2020 did not appear new to our representatives. In particular, the presentation of the general aspects and conditions of the interlinked model. Eurelectric welcomed the additional information regarding the development and the way the ENTSOs would organize the "next steps".

Nevertheless, more clarity and explanations are welcomed on how ENTSOs will consider and integrate inputs provided by stakeholders along the scenario process. The timeline with the different milestones and deadlines for each work packages could be further explained and simplified.

5. ENTSOE and ENTSOG has published a list of all bilateral meetings and all stakeholder questions (including answers) on the TYNDP Scenarios website.

How satisfied are you with the level of transparency provided by the Scenario Building Team?

1 ○ 2 ○ 3 ● 4 ○ 5 ○

6. How satisfied are you with the format and the level of explanation in the Storyline Report?

1 ○ 2 ○ 3 ● 4 ○ 5 ○

7. The main aim of the TYNDP Scenario Report is to create scenarios that can test the future development of energy infrastructure.
To what extent do you feel these storylines provide a good overview of the challenges facing infrastructure development in the next thirty years?

1 ○ 2 ● 3 ○ 4 ○ 5 ○

8. To what extent do you feel the Storyline report provide a clear overview of the two storylines (i.e. presents the most important information, outlines similarities and differences in the storylines etc.)?

1 ○ 2 ○ 3 ● 4 ○ 5 ○

9. The TYNDP Storylines has defined ranges for key parameters (greenhouse gas emissions, technology development) based on information from external, publicly-accessible studies.

How satisfied are you with this approach?

1 ○ 2 ○ 3 ● 4 ○ 5 ○

10. The EC LTS Scenarios 1.5LIFE and 1.5TECH consider between 2000 and 2900 TWh of bioenergy production in 2050. Do you feel that this is a realistic benchmark for sustainable bioenergy production?

1 ○ 2 ○ 3 ● 4 ○ 5 ○

COMMENT:

Eurelectric does not have any specific figure about bioenergy production in its Eurelectric Decarbonisation Pathways. Please note also that the EC LTS Scenarios looked at the use of bioenergy by all sectors (i.e. power, industry, transport, etc.) which seems more conservative and realistic.

11. Considering that currently published scenarios might not accurately capture the development of fuel cell electric vehicles (FCEV), should at least one of the TYNDP scenarios include higher market shares?

YES **NO**

Given the discontinuation of some early FCEV models in the passenger car segment, Eurelectric does not expect a high FCEV scenario to be realistic in 2030 to say the least. The development is limited by the lower efficiency of FECV and the expected progress in technology and cost vs. EV. This element has been also confirmed by several automotive CEOs when describing their company's plans for the coming decade.

Additionally a 'path dependency' effect will affect the adaptation of Fuel Cells for Passenger cars as opposed to Hybrid/Battery Electric vehicles. It is foreseen that EV Charging stations will be plentiful by 2030 so that the economics of then competing against such a network with Fuel Cells requiring Hydrogen will be increasingly difficult. For instance, customers of EV can expect to charge easily their passenger vehicles at home.

FCEV would have relevance in the heavy-duty segment in case the FCEV can actually respond to technical and cost challenges set on them by EV. In particular it seems unlikely that battery systems

will be economic in powering trucks given the high weight of battery required for long distance heavy trucks. In these cases, the higher power density afforded by FCEV and Hydrogen will be much more feasible if the practical challenges of this technology could be fixed to make it operational.

12. How appropriate is the technology selection chosen for the storyline Global Ambition? Are certain technologies missing/wrongly included?

First of all, Eurelectric welcomes the assumption that the transition will require both centralised and decentralised options in any scenario (although in different proportions).

However, Eurelectric **noticed substantial missing pieces in both storylines**:

- **Existing renewable technologies** are missing such as hydro power plants and hydro pumped storages.
- **Future potential technologies** are missing such as gas-fired generation (for example, CCGT), which could be using renewable and low-carbon gases instead of natural gas. For instance, Power-to-X development shall be considered in combination with Gas-to-power, for example by burning hydrogen or synthetic methane in gas turbines.
- **Possible flexible power assets** are missing such as e.g. gas-fired power plants, hydro storage and pumped storage, batteries, and others new storage solutions, fuel cells, flexible CHP, Demand Side Response, smart charging; as well as additional interconnectors to utilize cross-zonal flexibility and to meet the electricity demand in these situations. In this sense, only a serious CBA assessment jointly carried out by power and gas TSOs can illustrate the implications on infrastructure costs for each scenario and give orientations to the regulatory measures and incentives to take.
- **Import assumption** should in fact be considered in both scenarios. The main issue is the potential impact on the scenarios of the import assumption of Power to X-related products. Neither the EC LTS nor the latest 2030 Climate Target Plan scenarios include such an import assumption.
- **One substantial criterion is missing: "security of electricity and gas supply"**. As the core responsibility of system operators is to ensure security of supply for their networks, the storylines should mention adequacy of installed capacity to meet demand, availability and reliability of power and gas transmission infrastructures, etc.
- **Both storylines should consider that the starting points and commercial availabilities of key transition technologies**, especially to provide new storage options, are different.
- **The effects of market mechanisms and of internal cross-border exchanges are insufficiently discussed or missing i**n both scenarios.

Moreover, the type of hydrogen used in industrial applications can be further detailed (Steam methane reforming + CCS, pyrolysis, electrolysis…) from both a supply and networks integration perspectives, especially in a TYNDP exercise. The definitions provided by the European Commission's Hydrogen Strategy for a climate-neutral Europe should be used as a starting point.

Furthermore, Global Ambition storyline still considers the shares of methane import in 2050, with "CCS is an option to support decarbonisation of some industrial processes" (p. 11). With regards the assumptions on CCS, it would be interesting to have more details on where carbon capture would take place (i.e. at entry of Europe and/or within Europe), as localization of carbon capture units may have different implications in terms of hydrogen, gas or CO2 infrastructures use and needs. And whether any path would be subject to technology check and CBA assessment which is an inevitable step to support the feasibility and appropriateness of scenarios.

Eurelectric also suggests that the distinction between CCS and CCU becomes clearer, as there is a demand for carbon in both scenarios to process hydrogen into e-fuels. This could affect the projected power generation albeit hydrogen used in e-fuels should be assumed to originate from a sustainable carbon source such as biomass power generation.

In addition, one characteristic of the Global Ambition storyline is the integration of nuclear to "complement the energy mix to a limited extend, largely led by national energy policies" (p. 11) – for electricity generation. Based on a technology neutral approach, this complementarity role would encompass, for instance, the production of Hydrogen through electrolysis of water.

With regards to the methodology, Eurelectric believes that the main aim of the storylines is to assess the needed infrastructure to be build out in different scenarios. In this respect, it may be more realistic to build scenarios that give a wider range of the future and represent alternative paths, within the existing discussions around the future in the energy sector needs for infrastructures.

To conclude, Eurelectric considers that the proposed storylines provide two stress test cases: on one hand, Storyline "Distributed Energy" which is extremely decentralized and based on an utmost focus on "self-sufficiency" and, on the other hand, "Global Ambition" which depicts a strongly centralized system biased to gas. While stress tests can be of interest to assess the resilience of the energy infrastructure, Eurelectric believes that none of them describes what could be the most probable scenario, which will likely be a combination of the two proposed scenarios.

13. How appropriate is the technology selection chosen for the storyline Distributed Energy? Are certain technologies missing/wrongly included?

COMMENT:

As a general remark, most of the comments that Eurelectric provided in Question 12 apply to Storyline "Distributed Energy".

While Storyline "Distributed Energy" is relatively aligned with Eurelectric key positions, as far as compatible with a higher degree of electrification, as well as the Energy System Integration Strategy, Eurelectric regrets the insufficient presence of future and existing technologies such as hydro power plants, hydro pump storage and gas-fired generation (CCGT, GT, engines) capable to use renewable and low-carbon gases in this scenario as well.

However, Eurelectric welcomes the highlight on the role of citizens as well as the use of hydrogen produced from renewable and low-carbon electricity, as well as other low-carbon and renewable gaseous and liquid fuels for the hard-to-decarbonised sectors, with full openness to market solutions and potential energy imports.

14. In the TYNDP 2020 Storyline Report, general parameters were provided for consultation on a +/- basis. In the 2022 Storyline Report we have attempted to provide greater quantitative options.

How satisfied are you with this improvement?

1 ○ 2 ○ 3 ○ 4 ◉ 5 ○

15. Are you satisfied with the range for the market share of electric heat pumps provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation), the key assumptions for space and water heating are:

- Residential:
  - Strong emphasis on electrification as key lever for decarbonisation
  - 80% of installed base to be electric by 2050, with remaining 20% provided by alternatives when electric heat pumps are not an option (e.g. green gas, hydrogen and district heating)
- Commercial: Electric solutions make up 90% of the installed base.

In this regard, Eurelectric supports storyline "Distributed Energy", compatible with a higher degree of electrification, as it gives a predominant role for proven efficient paths to efficient Cooling and Heating solutions through electric heat pumps, which is overall aligned with Eurelectric scenarios and the objective of carbon neutrality by 2050. For the storyline "Global Ambition", we would welcome further details on the use of methane and of oil imports, in order to better understand how they are gradually replaced by renewable and low-carbon gases and fuels on the 20-year TNYDP horizon.
Regarding hydrogen, Eurelectric believes that it will be primarily used in sectors such as industry and transport (maritime, aviation, heavy-duty vehicles). Therefore, we would welcome more details for both scenarios on how it would be used in other sectors such as the building sector.

16. Are you satisfied with the range for the market share of hybrid heat pumps provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In its Decarbonisation Pathways, Eurelectric does not have specifically consider hybrid heat pumps. But in the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation) , the key assumptions for space and water heating are:

- Residential:
    - Strong emphasis on electrification as key lever for decarbonisation
    - 80% of installed base to be electric by 2050, with remaining 20% provided by alternatives when electric heat pumps are not an option (e.g. green gas, hydrogen and district heating)
- Commercial: Electric solutions make up 90% of the installed base.

In this regard, Eurelectric supports Scenario "Distributed Energy", compatible with a higher degree of electrification, because it gives a predominant role for proven efficient paths to efficient Cooling and Heating solutions through electric heat pumps, which is overall aligned with Eurelectric scenarios and the objective of carbon neutrality by 2050.

A key element for discussing the shares of electric and of hybrid heat pumps is related to the impact that each technology could have on the demand figures, esp. during stress events (contribution to peak load). As pointed out in the scenario report, one should pay attention that technologies having an impact during stress events or cold snaps could have in turn implications on security of supply and on the cost for consumers, making assumptions on hybrid heat pumps a key parameter for scenario design.

17. Are you satisfied with the range for the market share of district heating provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation) , the key assumptions for space and water heating are:

- Residential:
    - Strong emphasis on electrification as key lever for decarbonisation
    - 80% of installed base to be electric by 2050, with remaining 20% provided by alternatives when electric heat pumps are not an option (e.g. green gas, hydrogen and district heating)
- Commercial: Electric solutions make up 90% of the installed base.

In our study, district heating is part of the "alternatives". Thus the market share of district heating is maximum 20% in the case of residential buildings and 10% for commercial buildings. District heating is an efficient way of flexible utilisation of different sources of waste and ambient heat through heat pumps. District heating also enables utilisation of excess renewable electricity through power-to-heat installations, when combined with heat accumulators. District heating should solely be based on renewable and recovery energy by 2050 alongside a fossil fuel phase-out.

18. Are you satisfied with the range for the market share of electric vehicles provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

The 2nd Scenario of Eurelectric Decarbonisation Pathways (90% of decarbonisation) foresees 80% of

market share for EVs by 2050.

19. Are you satisfied with the range for wind energy provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation) :

Total wind: **1 110 GW by 2045** (643 GW for wind onshore and 467 GW for wind offshore)

NB: the area covered by this figure is broader than EU countries (EU+)

Scenario Distributed Energy, compatible with a higher degree of electrification, is overall more aligned with Eurelectric pathways, However, Eurelectric wonders whether the EC offshore strategy has been properly taken into account in both scenarios. Indeed, the stated ambitions and the roll-out of this strategy should have major impacts on the analysis of the infrastructure needs by 2030/2040/2050.

Eurelectric would welcome to get a clear distinction between offshore and onshore wind technologies. Both technologies are individually big enough contributors to be treated individually and differently: each of them should have their own ranges.

20. Are you satisfied with the range for the share of solar/PV energy provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation) : 951 GW.

NB: the area covered by this figure is broader than EU countries (EU+)

Scenario Distributed Energy is overall more aligned with Eurelectric pathways. However, both Scenarios should have a wide enough range for new RES potentials, in order to prepare adequate grid investment plans for the potential RES growth.

21. Are you satisfied with the range for the share of nuclear energy provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In the Scenario 3 of Eurelectric Decarbonisation Pathways (95% of decarbonisation) : **121 GW** by 2045.

In this regard, Eurelectric believes that Scenario GA is more aligned with Eurelectric pathways as the electricity sector envisions a very low carbon energy system in 2050, where renewable and nuclear will form its backbone, as also stated in the EC's strategic long-term vision (2018). Eurelectric's Decarbonisation pathways concludes that in its most ambitious decarbonisation scenario the bulk of electricity is provided by renewables, with nuclear playing a strategic complementary role in terms of system reliability and flexibility. In Eurelectric's Power Barometer (2020) this trend is already visible for the decade 2020-2030.

As such, nuclear remains an energy policy option in some countries, either with existing units (incl. lifetime extension) or with new units. However, it is not an option in other countries, which will have to rely on flexible capacities (like gas-fired powerplants, storage, demand response) to cope with the increasing share of renewables.
For the TYNDP 2022 scenarios, the proposed general nuclear unit lifetimes of 45/55 years might be appropriate as a European-level average, while keeping in mind that, in many countries, it is possible that national calculations foresee clearly longer lifetimes for the plants.

22. Are you satisfied with the range for the share of energy imports provided in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

Eurelectric welcomes that Storyline "Distribution Energy" foresees a deep electrification of the sector together with the significant uptake of local renewable gas production.
On energy imports (mostly methane and Hydrogen), Eurelectric notices a significant decrease compared to TYNDP 2020 – i.e. Storyline " Distributed Energy" foresees a 65% drop of gas imports compared to the present level.

Storyline "Global Ambition" is similar to EC' scenarios in terms of energy import, but with higher share of Hydrogen and methane imports than into the "Distributed Energy" storyline (whereas EC scenarios anticipates higher imports of oil than considered in both DE and GA storylines). It is worth noting that the EC LTS 1.5TECH scenario does not assume any Power to X-related imports.

Eurelectric understands that the differences of imports are considered between a decentralised Scenario vs. a centralised Scenario, but it would be of interest to get more details on the differences in term of imports mix and the reasons behind.

In addition, Eurelectric wonders what the status is for electricity imports arising from interconnections with non-EU Member States.

23. Are you satisfied with the electrolysis capacity considered in the Storyline Report? If not, please provide clear references for figures in your response.

YES **NO**

COMMENT:

In Storyline Global Ambition, the gas imports represent a high share of the total gas demand of the EU. The rationale behind such an assumption is unclear.

This impacts the expected build out of electrolysis capacity for hydrogen and e-fuels, which is very low in the GA Storyline.

According to Eurelectric Decarbonisation Pathways, there will be 297 TWh (Sc 1), 539 TWh (Sc 2) or 784 TWh (Sc 3) of additional electricity consumption to produce Hydrogen by 2050.

However, as addressed by the EC in the Strategies on Hydrogen and on Energy Sector Integration, the assessment on the position for the electrolysers is different from the statements laid down in the Storyline report.

The most immediate application of hydrogen is the production of decarbonised feedstock for the industry demands, with locations in the vicinity of the industrial facilities. The second could be the connection to the activities for which the decarbonisation cannot be achieved through electrification. And the third could be the use of hydrogen as energy storage for system balancing.

For the remaining potential uses of clean hydrogen, the evolution of the technology and cost curves must lead the orientation of the logistic model and hence, the infrastructures planning. The premature deployment of infrastructures based on hypothesis linked to pending technology advances and cost evolution can lead possibly to stranded investments, whatever the energy carrier. CBA applied to a set of presumptions can likely lead to totally misleading conclusions, which pleads for very sound, unbiased and coordinated CBAs.

24. Are you satisfied with the approach for modelling flexibility options provided in the Storyline Report? If not, please provide clear references for figures in your response

YES **NO**

COMMENT:

Eurelectric is missing some mention of hydropower/pumped storage for modeling flexibility options, which is to date the most efficient bulk storage for electricity and the only effective for “long” term seasonal storage for electricity.

In addition, Eurelectric would like to stress that distributed (i.e. residential) demand response should be mentioned together with the other flexibility options (tertiary and industrial demand side response). Also, Eurelectric is missing the inclusion of upward flexibility, i.e. additional electricity use during low electricity prices e.g. through electric boilers for heat production or through production of synthetic methane, reducing the need to curtail RES generation.

Moreover, large/medium batteries are expected to provide specific services for electricity system/network management.

When considering investments in assets, one should keep in mind that these investments on flexibility will only take place if/when/where investors are able to justify sound business cases over the corresponding investment horizon. In practice, the market design and the investment frameworks in place will be essential for the scenarios to materialize.

25. Do you have any additional comments?

COMMENT:

As a general comment, the quality of the report has improved compared to the previous one for the TYNDP 2020. ENTSOs are providing more explanations on the way to develop the storyline and are also clearer in the different concepts used. However, there are still room for improvement with regards the definition of the scenarios, and the matrix provided to illustrate the storylines which is hardly readable.

Eurelectric considers that the proposed storylines provide two stress test cases: on one hand, "Distributed Energy" Scenario which is extremely decentralized and utmost focus on energy "self-sufficiency" and on the other hand, "Global Ambition" which depicts a strongly centralized system and biased. While stress tests can be of interest to assess the resilience of the energy infrastructure, Eurelectric believes that none of them describes what could be the most probable scenario, which will likely be a combination of the two proposed scenarios (extreme cases that do not represent the alternatives in discussion across the energy system.).

Nonetheless, Eurelectric considers that the narrative of the scenarios should be neutral, as both are subject to similarly strong hypothesis on technology development and both lead to very different infrastructure deployment to assess through a CBA which is a critical step to define the feasibility and appropriateness of any alternative.

Eurelectric wonders whether the storylines have been developed and are in line with the EC strategies on Energy System Integration, Hydrogen or on Offshore Renewable Energy.

With regards others important elements mentioned in the storylines but not directly pointed out in this questionnaire, Eurelectric would like to stress the followings:

- With regards the alternative "Prosumers or global synergies", Eurelectric believes that any source of flexibility in the future green electricity system is most welcome, so excluding either demand or supply side flexibility from one or the other scenario is from that point of view surprising. Therefore, Eurelectric kindly suggests a third scenario with best guess for extensive flexibility on both supply and demand sides, i.e. combining the best from the two scenarios.

- With regards the "energy intensity development", Eurelectric acknowledges that it is of utmost importance for the future requirements of the electricity system. However, the suggested implementation of energy intensity development in the scenarios may reduce their clarity rather than enhance it. Therefore, Eurelectric suggests for energy intensity to be moved to sensitivity analyses so that resilience of the scenarios with regards to energy intensity developments can be stress tested.

- With regards the matrix in annex, Eurelectric would like to comment on two risk factors:
    - "Aviation and shipping - Synthetic liquids" are chosen as "Lower" in Scenario Global Ambition. But these fuels are produced centrally and may thus yield supply side synergies and flexibility. Shouldn't this be set to "Higher" for GA and "Lower" for DE?
    - "Low temperature heat demand – District heating (circularity)" is chosen as "Lower" in GA. District Heating may in many cases be seen as a central technology yielding synergies (CHP, storage) with other supply. Thus, Eurelectric wonders if it should be set to "Higher" for Scenario Global Ambition and "Lower" for Scenario "Distributed Energy".
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Consequently, Eurelectric suggests revisiting these choices for these two risk factors in the scenarios, either by changing the choices made or by clarifying these choices.

eurelectric
powering people

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability

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