

# Consultation on the draft harmonised energy system-wide cost-benefit analysis for candidate smart electricity grids projects

Fields marked with \* are mandatory.

## Consultation on the draft methodology for a harmonised energy system-wide cost-benefit analysis for candidate projects in the smart electricity grids category

### Why we are consulting

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Regulation (EU) 2022/869 (in the following, “TEN-E Regulation”), in force since June 2022, lays down guidelines for the timely development and interoperability of the priority corridors and areas of trans-European energy infrastructure which contribute to climate change mitigation by supporting the achievement of the EU climate and energy 2030 targets and the EU climate neutrality objective by 2050 at the latest. The revised TEN-E Regulation enables the development of interconnections, strengthens energy security, furthers market and system integration and promotes competition that benefits all Member States and their citizens.

Smart electricity grids are key to supporting the accelerated electrification of the energy system. They are an established infrastructure category since the adoption of the TEN-E Regulation in 2013. The revised TEN-E Regulation simplifies and broadens the criteria for smart electricity grid projects with the aim of scaling up this category.

For the assessment of candidate projects in the smart electricity grids infrastructure category, Article 11(8) of the revised TEN-E Regulation states that: *"For projects falling under the energy infrastructure categories set out in point (1)(c) and (e) and in points (2), (4) and (5) of Annex II, the Commission shall ensure the development of methodologies for a harmonised energy system-wide cost-benefit analysis at Union level. Those methodologies shall be compatible in terms of benefits and costs with the methodologies developed by the ENTSO for Electricity and the ENTSO for Gas. The Agency, with the support of national regulatory authorities, shall promote the consistency of those methodologies with the methodologies elaborated by ENTSO for Electricity and the ENTSO for Gas. The methodologies shall be developed in a transparent manner, including extensive consultation of Member States and of all relevant stakeholders."*

In line with the legal requirements set out in Article 11(8) of the TEN-E Regulation, this draft CBA methodology for candidate projects in the smart electricity grids category has been developed by the JRC, the European Commission (the “Commission”) science and knowledge service. In particular the smart

electricity grids CBA methodology has been developed to ensure a harmonised energy system-wide cost-benefit analysis at Union level and it is compatible in terms of benefits and costs with the methodologies developed by the ENTSO for Electricity and the ENTSO for Gas pursuant to Article 11(1) of TEN-E Regulation.

**This consultation is open to all interested stakeholders from 7 October to 6 January.** The aim of the consultation is to seek input to the **draft methodology for a harmonised system-wide cost benefit analysis for candidate projects in the smart electricity grids category.**

## Information about the participant to the consultation

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First name

Layla

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Position

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\* Type of organisation:

- Public authorities
- National regulatory authorities
- Transmission system operator
- Industry associations
- SMEs
- Consumer organisations
- Project promoter
- NGOs
- Environmental organisations
- Consultancies
- Citizens
- Other

If "other", please specify:

Country:

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden

Language of your contribution:

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- Gaelic

- German
- Greek
- Hungarian
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

Replies are welcome in any official language of the European Union. Given possible delays in translating replies submitted in other languages, contributions in English are encouraged, as they will help the Commission process the input more swiftly.

## Information on how to respond to the consultation

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In order to submit your contribution to this consultation, you are invited **to download the draft methodology for a harmonised system-wide cost benefit analysis for candidate projects in the smart electricity grids infrastructure category**:

### Privacy statement (for download)

[Privacy Statement - Targeted consultation on CBA Methodologies candidate projects under the revised TEN-E Regulation - 2022.pdf](#)

Please confirm you have read through these important elements, including the privacy statement on the processing and protection of your personal data

## Part one (general)

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**In your view, to what extent does the draft methodology allow for a harmonised energy system-wide cost-benefits analysis at Union level?**

currENT believes that the methodology for analysing the costs and benefits of PCIs is generally sound. However, there are several ways in which the methodology does not fully capture the value of new and innovative technologies.

This first of all concerns the time horizon for which the BAU and the SEG scenarios are considered. Many fast-acting solutions can increase the capacity of the grid already within the next 1-2 years. However, if the CBA is calculated 5 years in the future, this does not capture the full value of solutions that can deliver benefits much more quickly. It also requires certain assumptions to be made about the BAU scenario, about which projects will have been completed before the starting point of the CBA. However, this does not factor in the cost of delays. For example, a fast-acting solutions could bring even more benefits if large infrastructure projects are delayed.

In addition, to not being able to show the years of additional benefit a quicker to deliver solution would provide in the intervening years a second issue arise as to the speed of construction of a solution. Typically for projects with a greater environmental impact, either due to their size, or make up take longer to plan and construct. However, spending must start many years before a project is built. Smaller or less environmentally impactful projects quicker solutions avoid this and can be delivered as quickly as 1- 2 years rather than 10 years or more. If the profile of costs of the years of construction is not included in a CBA then the true CBA of a project is impacted and distorted. An unbiased assessment between projects therefore needs to reflect spend over the project and not just the final figure in its methodology.

Lastly, the CBA methodology does not capture the value of technologies that can be redeployed elsewhere or that can be rescaled or developed to manage unforeseen changes to future scenario[s].

## Part two (assumptions)

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**Do you have any feedback regarding the assumptions considered in the draft methodology?  
(section 2.1)**

## Part three (benefits)

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In this section, we seek your views on three aspects (definition, method of calculation, data) related to the **benefits considered in the smart electricity grids draft CBA methodology**, which are the following:

1. B1 - Increase of electricity generated from new renewable sources (pertaining to specific criterion on Sustainability - Article 4(3)(b))
2. B2 - Integration of renewables in the system (pertaining to specific criterion on Sustainability - Article 4(3)(b))
3. B3 - Reduction of greenhouse emissions (pertaining to specific criterion on Sustainability - Article 4(3)(b))

4. B4 - Level of losses in transmission and distribution networks (pertaining to criterion on Security of Supply, Article 4(3)(b)(i))
5. B5 - Percentage utilisation (i.e. average loading) of electricity network components (pertaining to criterion on Security of Supply, Article 4(3)(b)(i))
6. B6 - Availability of network components (related to planned and unplanned maintenance) and its impact on network performances (pertaining to criterion on Security of Supply, Article 4(3)(b)(i))
7. B7 - Duration and frequency of interruptions, including climate-related disruptions (pertaining to criterion on Security of Supply, Article 4(3)(b)(i))
8. B8 - Efficient and innovative system operation (pertaining to criterion Market integration, Article 4(3)(b)(ii))
9. B9 - Decrease of energy isolation and (increased) interconnection (pertaining to criterion Market integration, Article 4(3)(b)(ii))
10. B10 - Level of integrating other sectors and facilitating new business models and market structures (pertaining to criterion Market integration, Article 4(3)(b)(ii))
11. B11 - Innovation (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
12. B12 - Flexibility, balancing, demand response and storage (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
13. B13 - Peak demand reduction (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
14. B14 - Cybersecurity (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
15. B15 - Efficient operability between TSO and DSO levels (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
16. B16 - Energy efficiency (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
17. B17 - Cost-efficient use of digital tools and ICT for monitoring and control purposes (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
18. B18 - Stability of the electricity system (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))
19. B19 - Voltage quality performance (pertaining to the criterion Network security, flexibility and quality of supply, Article 4(3)(b)(iii))

20. B20 – Linking of energy carriers and sectors and favouring synergies and coordination between sectors (pertaining to the criterion on Smart sector integration, Article 4(3)(b)(iv))

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**B1 - Increase of electricity generated from new renewable sources**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B1 - Increase of electricity generated from new renewable sources**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

It is agreed that the methodology is sound for calculating the delta B1. What is missing is that it is not explicit that this should be recalculated for each year over the project life for inclusion in a CBA.

**B1 - Increase of electricity generated from new renewable sources**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B1 - Increase of electricity generated from new renewable sources**

**B2 - Integration of renewables in the system**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

## **B2 - Integration of renewables in the system**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

The method itself seems well proposed with the exception of where the new generation shall be assumed in the network to test the increase in the renewable integration. Is this increase in renewable integration only from existing generation already constrained? Alternatively, is it also for new generation that has made an application for connection, and is therefore known to be considered commercially viable by a developer, or can generation be added on the assumption that renewable generation could be developed anywhere on the network and to any scale the network can accommodate? All of these approaches could be justifiable, but it is not clear what is being proposed. We believe that considering the maximum integration by using existing first, planned as a guide and then new generation pro-rata dispersed in the network makes the most sense in the current period of very rapid economic development, and to test the maximum capability of the proposed project.

## **B2 - Integration of renewables in the system**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B2 - Integration of renewables in the system**

See answer above:

We believe that considering the maximum integration by using existing first, planned as a guide and then new generation pro-rata dispersed in the network makes the most sense in the current period of very rapid economic development, and to test the maximum capability of the proposed project.

## **B3 - Reduction of greenhouse emissions**

In your view, is the benefit well described in line with the legal base?

- Yes
- No



No opinion

If no, please explain why:

### **B3 - Reduction of greenhouse emissions**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

### **B3 - Reduction of greenhouse emissions**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B3 - Reduction of greenhouse emissions**

In order for project promoters to make calculations more easily the requirements on ENTSOE and EDSO to make available not only the transmission and ideally distributions networks models for promoters to use, but also the existing and assumed power generation/storage installed in these networks. Due to the commercial nature of these data provided by ENTSOE is transposed to typical data e.g. either a generic Combined Gas Turbine Type 1, 2, etc., but currently no location for these in Europe is not provided. Existing and assumed locational data will not represent commercial sensitivity as this data is nationally provided and by using generic generator types would be indicative and not absolute protecting commercial sensitivity.

### **B4 - Level of losses in transmission and distribution networks**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B4 - Level of losses in transmission and distribution networks**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B4 - Level of losses in transmission and distribution networks**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B4 - Level of losses in transmission and distribution networks**

**B5 - Percentage utilisation (i.e. average loading) of electricity network components**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B5 - Percentage utilisation (i.e. average loading) of electricity network components**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B5 - Percentage utilisation (i.e. average loading) of electricity network components**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

**Additional remarks with regards to B5 - Percentage utilisation (i.e. average loading) of electricity network components**

Percentage Utilisation is agreed a good measure of using components more effectively. Often these can defer other capital projects which is not currently captured in this metric. However it should be recognised that this increase must also maintain components within their safe working capabilities for the normal range of contingencies and not only scenarios to which the network would be tested to show its adequacy.

Measuring the before and after delta is implied, but not stated and would be a best practice approach, but testing with and without future planned capital reinforcement projects would show a supplemental benefit.

**B6 - Availability of network components (related to planned and unplanned maintenance) and its impact on network performances**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B6 - Availability of network components (related to planned and unplanned maintenance) and its impact on network performances**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B6 - Availability of network components (related to planned and unplanned maintenance) and its impact on network performances**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B6 - Availability of network components (related to planned and unplanned maintenance) and its impact on network performances**

**B7 - Duration and frequency of interruptions, including climate-related disruptions**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B7 - Duration and frequency of interruptions, including climate-related disruptions**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B7 - Duration and frequency of interruptions, including climate-related disruptions**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B7 - Duration and frequency of interruptions, including climate-related disruptions**

It is taken from the methodology that delta from BaU to SEG, is on the basis of the existing generation and storage sources, with only the proposed SG project elements included. However, for those projects that will

increase the integration of renewable resources, not directly associated with the project this provides a benefit for B7. It does this by supporting the region to combat climate change impacts (i.e. increased demand, loss of fossil fuel generation or storage) which would mitigate adverse climate change impacts on SAIDI and SAIFI. It is proposed this should be added as an option to the methodology.

### **B8 - Efficient and innovative system operation**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

### **B8 - Efficient and innovative system operation**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

The method itself seems well proposed with the exception of where the DER shall be assumed in the network to test the increase in the DER use. Is this increase in DER only from existing generation already constrained. Alternatively, is it also for new DER that has made an application for connection, and is therefore known to be considered commercially viable by a developer, or can DER be added on the assumption that DER could be developed anywhere on the network and to any scale the network can accommodate? All of these approaches could be justifiable, but it is not clear what is being proposed. We believe that considering the maximum integration by using existing first, planned as a guide and then adding further new DER pro-rata dispersed in the network makes the most sense in the current period of very rapid economic development, to be able to test the maximum capability of the proposed project.

### **B8 - Efficient and innovative system operation**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B8 - Efficient and innovative system operation**

See answer above about DER locational and size data requirements

**B9 - Decrease of energy isolation and (increased) interconnection**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B9 - Decrease of energy isolation and (increased) interconnection**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B9 - Decrease of energy isolation and (increased) interconnection**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B9 - Decrease of energy isolation and (increased) interconnection**

**B10 - Level of integrating other sectors and facilitating new business models and market structures**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

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**B10 - Level of integrating other sectors and facilitating new business models and market structures**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B10 - Level of integrating other sectors and facilitating new business models and market structures**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B10 - Level of integrating other sectors and facilitating new business models and market structures**

**B11 - Innovation**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B11 - Innovation**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B11 - Innovation**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B11 - Innovation**

ENTSO-E, and possibly in future E.DSO, technology toolboxes, seek to clarify the development level of a range of more well known innovation technologies, using the TRL system. This would provide a system operator accepted level of development and support where a new technology might be uncommon and therefore innovative, but represents a very low technological risk.

**B12 - Flexibility, balancing, demand response and storage**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B12 - Flexibility, balancing, demand response and storage**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

Whilst the methodology is in effect open ended for the developer to show as part of the project, the balancing, demand response and storage benefits as described, it does not recognize the ability of a SEG project to enable a higher use (e.g. through increased network capacity, greater voltage or network stability, harmonic mitigation, etc.) of existing balancing, demand response or storage capability and not their direct provision of things like communications to be able to operate these services. These can be shown in the same approach of a % increase by measuring the delta with and without the SEG project

**B12 - Flexibility, balancing, demand response and storage**



Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B12 - Flexibility, balancing, demand response and storage**

### **B13 - Peak demand reduction**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

### **B13 - Peak demand reduction**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

### **B13 - Peak demand reduction**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B13 - Peak demand reduction**

### **B14 - Cybersecurity**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

#### **B14 - Cybersecurity**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

The methodology discusses the risks and mitigations for Cyber security benefits arising from Smart Grid development, but not the benefits that a project might provide. For example use of ICT and network control technologies could act as standalone (not cyber connected) responses to counteract/mitigate the contingencies arising from a cyber attack e.g. manage loss of network components themselves or the control of them.

#### **B14 - Cybersecurity**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B14 - Cybersecurity**

#### **B15 - Efficient operability between TSO and DSO levels**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B15 - Efficient operability between TSO and DSO levels**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B15 - Efficient operability between TSO and DSO levels**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B15 - Efficient operability between TSO and DSO levels**

**B16 - Energy efficiency**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B16 - Energy efficiency**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

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**B16 - Energy efficiency**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B16 - Energy efficiency**

**B17 - Cost-efficient use of digital tools and ICT for monitoring and control purposes**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B17 - Cost-efficient use of digital tools and ICT for monitoring and control purposes**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B17 - Cost-efficient use of digital tools and ICT for monitoring and control purposes**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B17 - Cost-efficient use of digital tools and ICT for monitoring and control purposes**

**B18 - Stability of the electricity system**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

**B18 - Stability of the electricity system**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B18 - Stability of the electricity system**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B18 - Stability of the electricity system**

**B19 - Voltage quality performance**

In your view, is the benefit well described in line with the legal base?

- Yes
- No
- No opinion

If no, please explain why:

## B19 - Voltage quality performance

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

For both voltage distortion and line violations, the standards referred to our mainly for distribution networks. As the same issues will apply at SG elements at transmission levels, but not the same standards, the methodology either needs to includes these or require the developer to specify the standard used and reason for selection.

Also at transmission levels the step change can be important and a standard to be applied if even if it does not breach the maximum or minimum voltage level. Therefore, the methodology would be better look at the reduction in the scale of the worst case voltage rise of fall before and after the SEG project is added. This is simpler to calculate, and would give a scale of improvement provided by the project, can be assessed against planning standard criteria for transmission. It can also be easily used to check the expected number of excursions annually if applicable.

For voltage distortion THD there is also a maximum acceptable level and the same need to not show improvement with the SEG project, but also that it within the maximum threshold.

## B19 - Voltage quality performance

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B19 - Voltage quality performance**

IEC 41000-3-6 for voltage distortion levels at Transmission levels. Commission Regulation (EU) 2016/631 for the +/1% voltage ranges to apply at Transmission levels

## B20 – Linking of energy carriers and sectors and favouring synergies and coordination between sectors

In your view, is the benefit well described in line with the legal base?



- Yes
- No
- No opinion

If no, please explain why:

**B20 – Linking of energy carriers and sectors and favouring synergies and coordination between sectors**

Do you agree with the proposed method for calculating this benefit?

- Yes
- No
- No opinion

If no, please explain why:

**B20 – Linking of energy carriers and sectors and favouring synergies and coordination between sectors**

Do you have suggestions for data sources which could be used for the calculation of this benefit?

- Yes
- No
- No opinion

Additional remarks with regards to **B20 – Linking of energy carriers and sectors and favouring synergies and coordination between sectors**

**Is there any other benefit you would like to propose in line with the revised TEN-E Regulation?**

*Please justify the necessity of an additional benefit, as well as proposals on how to calculate it.*

Recognising the reusability/re-locatability of SEG elements: by at least including the residual value for those elements in a project that can be reused. Where it is known where the project will be reused then adjusting the NPV to include the cost of relocation and the secondary benefits of the project.

Resilience to change[s] of a SEG project or its element as the future scenario[s] evolve. This benefit can be calculated by adjusting key parameters in section 2 assumptions, but it is recommended at least peak demand to see what % of change can be endured +/- before a project no longer functions. For those project elements that are rescalable and reusable these may be adjusted as existing assets will not become stranded.

## Part three (additional remarks)

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**Is there any other feedback related to the draft methodology you would still like to share?**

*You can use the text box below or upload your document.*

*Upload here:*

For any questions, please send us an email at:

[ENER-C4-PROJECTS@ec.europa.eu](mailto:ENER-C4-PROJECTS@ec.europa.eu)

### **Contact**

[Contact Form](#)