*PCI Application Templates*

Templates for a Cost Benefit Analysis

Qualitative Analysis

Template #1

1. General Introduction to ENTSOG CBA Templates

The purpose of the template series provided by ENTSOG is to ease the work of Project Promoters when preparing the Project-specific Step of their Energy System Wide Cost Benefit Analysis. The templates have been created to be filled out for each Group, as analysed in the Project-Specific Step of the ESW-CBA Methodology. The templates enable the entry of project specific information as well as the introduction of Group related information. The filled out templates have to be sent to Commission 3 weeks after the receipt of the Economic Analysis Template and the modelling results at the end of March. About the details of sending back the Templates, COM will provide further information.

The template series contains the following files:

* Template #1 – present document - .docx format

Template for the text-format inputs of the Promoter

* Template #2 – Financial Analysis - .xlsx format

Template for preparing the Financial Analysis

* Template #3 – Economic Analysis - .xlsx format

Template for preparing the Economic Analysis and for aggregating results of the project specific simulations

1. Group Description

|  |  |
| --- | --- |
| Group Description | *Group #* |
| Infrastructure Corridor | Enter the Infrastructure Corridor |
| Rationale and Background | Elaborate on the rationale and background of the Group |
| Group Composition |  |
| Project 1 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 2 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 3 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 4 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 5 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 6 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 7 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 8 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 9 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Project 10 TYNDP Reference number | TYNDP Project Reference | Project Name | Choose an item. | Project Promoter | Previous PCI list number |
| Group Benefits |
| Specific Criteria | Market Integration [ ] Explanation based on simulation results |
| Security of Supply [ ] Explanation based on simulation results |
| Sustainability [ ] Explanation based on simulation results |
| Competition [ ] Explanation based on simulation results |
| Other Benefits | Lifting isolation of at least one MS [ ] Explanation based on simulation results |
| Reducing bottlenecks [ ] Explanation based on simulation results |
| Interoperability and system flexibility [ ] Explanation based on simulation results |
| Source Diversification [ ] Explanation based on simulation results |
| Route Diversification [ ] Explanation based on simulation results |
| Sustainability/Emissions/Intermittent Generation/Renewable Gas [ ] Explanation based on simulation results |

1. Projects’ Description

Reference to 7.7 Stage 1 in CBA Methodology

Please select from following tables depending on the project type. Please fill one of below tables for each project in the group, copy the tables as many times as necessary. Description should be consistent with data provided for TYNDP 2015 submission. Define the objective of the projects, indicating which criteria they comply with, as described in Art.4 of the Regulation 347/2013.

|  |  |
| --- | --- |
| **Project Description –Common for all project Types** | TYNDP Reference number |
| Type | Choose an item. |
| Project Name | Project Name |
| Project Promoter Name | Project Promoter |
| Project Rationale and Background (incl. General Critera– Art.4. Reg 347/2013) | Text |
| FID Status | Choose an item. |
| FID Year | Click here to enter a date. |
| Permitting Phase Ends | Click here to enter a date. |
| Start of Construction | Click here to enter a date. |
| Date of Grant attainment for studies/works under previous PCI list | Choose an item.Date of Grant attainment |
| Potential Delay compared to previous selection process (in years) | Delay in yearsExplanation |
| Last Completed Phase of Project | Last Completed Phase of Project |

|  |
| --- |
| **Transmission Projects** |
| Name, length and diameter of the pipeline sections | Section NameSection NameSection NameSection Name | Length (km)Length (km)Length (km)Length (km) | Diameter (“ and cm)Diameter (“ and cm)Diameter (“ and cm)Diameter (“ and cm) |
| Type of pipeline project | Choose an item. |
| Increments | IP Name | Flow Direction | Incr. Com yr. |
| IP Name | Flow Direction | Incr. Com yr. |
| IP Name | Flow Direction | Incr. Com yr. |
| Compressor Power (MW) | Compressor Power in (MW) |
| Other Criteria | The project concerns investment in reverse flow capacity [ ] The project changes the capability to transmit gas across the borders of the MSs concerned by at least 10%, compared to prior to the commissioning of the project [ ]  |

|  |
| --- |
| **LNG and CNG Terminal Projects** |
| Send out capacity | GWh/d |
| Maximum ship size  | m3 of LNG or CNG |
| Storage capacity | m3 of LNG or CNG |
| Other Criteria | The project aims at supplying directly or indirectly at least two MSs [ ] The project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Reg. 347/2013 [ ]  |

|  |
| --- |
| **UGS Projects** |
| Storage Type | Storage Type |
| Injection Capacity;  | GWh/d |
| Withdrawal Capacity | GWh/d |
| Working Volume | GWh |
| Other Criteria | The project aims at supplying directly or indirectly at least two MSs [ ] The project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Reg. 347/2013 [ ]  |

1. Qualitative Analysis –

Reference to 7.12 – Stage 9 in CBA Methodology

* 1. Identification of the significantly impacted countries and the Area of Analysis

*Please identify the Area of Analysis concerned by your group of project (Reference to 7.12.4 – Stage 9 in CBA Methodology)*

|  |
| --- |
| Impacted Area – List of Impacted Countries |
| Member States and third countries on whose territory the projects are built | Countries  |
| All directly neighbouring Member States (geographically) | Countries |
| All other Member States significantly impacted by the projects, identified through the application of the incremental approach | Impacted Countries based on simulation results |

*The meaning of significant impact is to be defined by Regional Groups based on the guidance given under chapter 9.6 of the CBA Methodology.*

* 1. Comments on the Quantitative and Monetary Analysis of the TYNDP Step of ESW-CBA

Please provide your comments on the results of the whole group (Left column)

Please provide your comments on the interaction between your Group of projects and other projects included in your Group’s Impacted Area, in the light of the commented indicator. (Right column)

|  |
| --- |
| **Comments on Disrupted Demand and Remaining Flexibility** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Comments on Supply Source Dependence evolution** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Comments on Price Source Dependence evolution** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Comments on Price Source Diversification evolution** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Comments on Price Convergence evolution** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Comments on Monetization evolution** |
| Text | Project GroupChoose an item.Project GroupChoose an item.Project GroupChoose an item. |

|  |
| --- |
| **Disrupted Demand Monetization** |
| Optional – In case elaborating this section, you shall refer to 7.12.2 of CBA Methodology |

* 1. Capacity Based Indicator Results and Comments

Reference to 5.1.3 of the CBA Methodology

|  |
| --- |
| **N-1** |
| Result – Before/After; High/Low;By Year | Comments |
| **Bi-Directional Project indicators** |
| Result | Comments |
| **Import Route Diversification Index** |
| Result | Comments |

* 1. Environmental Impact

Reference to 7.12.5 – Stage 9 in CBA Methodology

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Section of the Project** | **Stage of the Project** | **Type of Infrastructure** | **Surface of Impact** | **Environmentally Sensitive Area** | **Mitigation Measures** |
| **Section 1** | Text | Text | Text | Text | Text |
| **Section 2** | Text | Text | Text | Text | Text |
| **Section 3** | Text | Text | Text | Text | Text |
| **Section x** | Text | Text | Text | Text | Text |

* 1. Comments on additional benefits

*Please justify your explanation*

|  |
| --- |
| **Emission reduction other then CO2** |
| Text |
| **Support to RES intermittency** |
| Text |
| **Bunkering facility associated to LNG terminal supporting the development of cleaner transport** |
| Text |
| **Opening of foreclosed markets** |
| The use of a single price curve for a given source in the ESW-CBA does not enable to capture the market power of predominant supplier in term of price settingt |
| **Other** |
| Text |

* 1. Explanation on Financial Analysis

|  |
| --- |
| **Explanation on CAPEX, OPEX, Revenue Flow and Financial Discount Rate** |
| Please provide explanation to CAPEX estimate, OPEX estimate, Revenue assumptions, the setting of Financial Discount Rate and Financial Analysis Results |

* 1. Explanation on the Monetization of the Economic Analysis

|  |
| --- |
| **Explanation on the results of the Monetization and the Economic Performace Indicators** |
| Please provide explanation on the results of the Monetization and the EPIs |