



CBA Excel tool for CEF calls

JASPERS Networking Platform
Economic Appraisal methodologies and CPR requirements in
the 2021-2027 Period

Krzysztof Dzięcielak

Financial Engineering Advisor

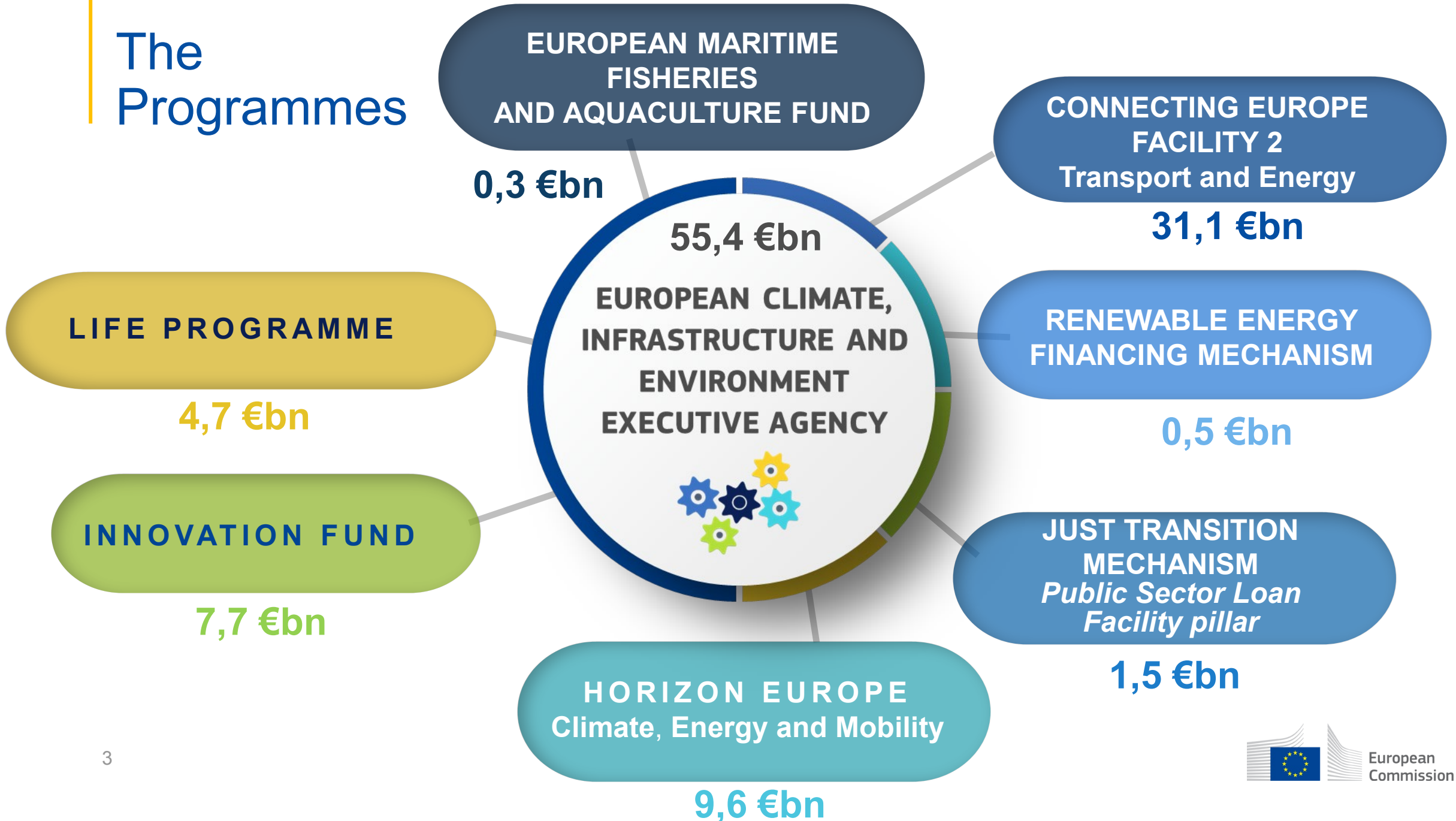
CINEA - European Climate, Infrastructure and Environment Executive Agency

From INEA to CINEA



- Since 2014, INEA has grown its CEF and H2020 portfolio
- From April 2021 we become **CINEA** - the **Climate, Infrastructure and Environment Executive Agency**
- Adding new 2021-2027 programmes in other areas such as climate, environment, maritime
- CINEA will become the EU **focal point** for green and infrastructure projects giving a key contribution to the European Green Deal

The Programmes



Connecting Europe Facility



What

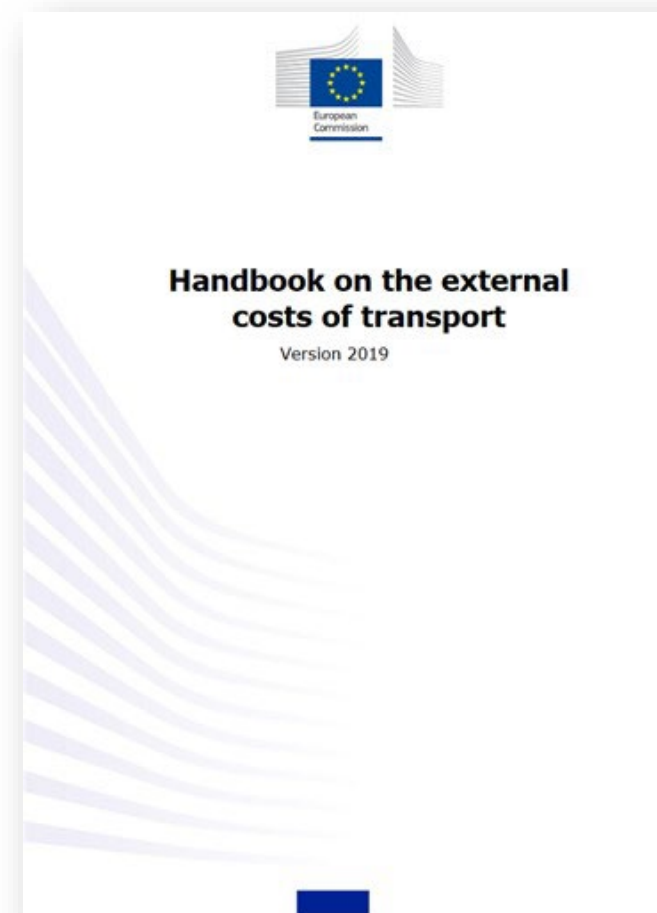
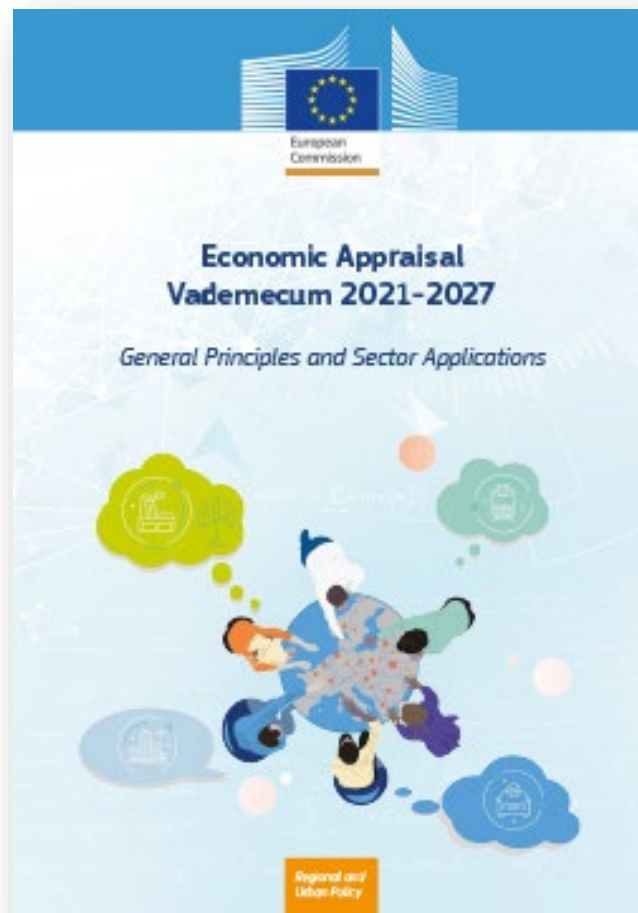
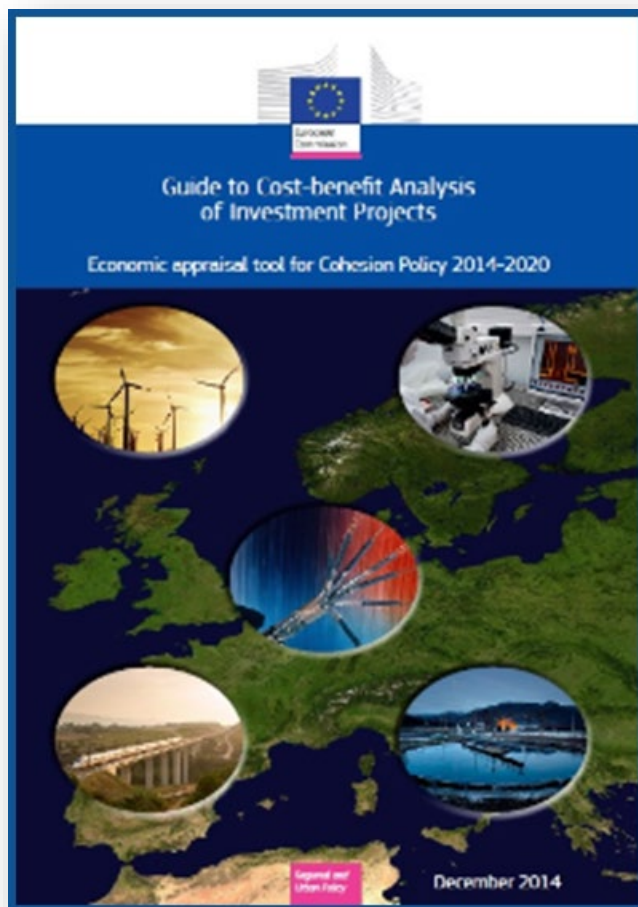


Who



How

General methodological documents



CBA Requirement

- The requirement for socio economic assessment has been streamlined in this programming period to take account of the added value of the tool for each priority
- There are now three levels of granularity of information
 - Full CBA
 - Simplified CBA
 - For some categories no CBA is required
- No more Cost Effectiveness Analysis (CEA)

* The threshold applies to eligible costs

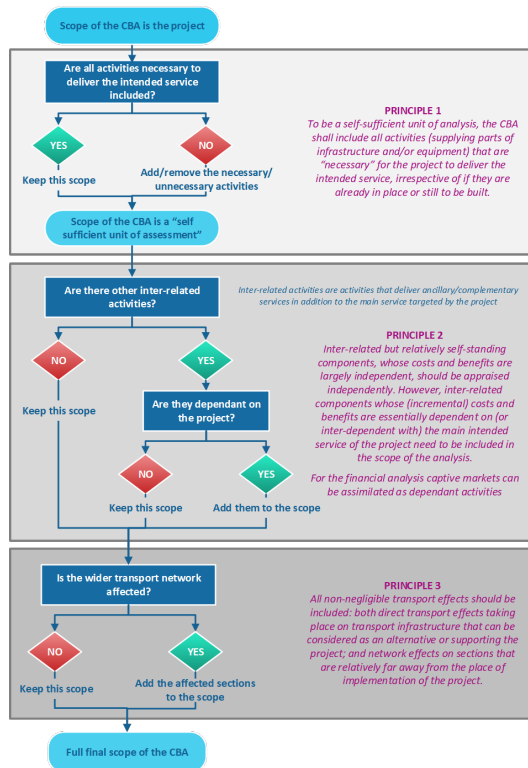
CBA requirement by priority

Work programme “Objectives”	Priorities	Requirement
6.1 Projects related to the efficient, interconnected, interoperable and multimodal networks		
	Railways	Full CBA / Simplified < 10 m€ *
	Inland waterways and inland ports	Full CBA / Simplified < 10 m€ *
	Maritime ports	Full CBA / Simplified < 10 m€ *
	Roads, rail-road terminals, connections to airports and multimodal logistics platforms	Full CBA / Simplified < 10 m€ *
6.2 Projects relating to smart, interoperable, sustainable, multimodal, inclusive, accessible, safe and secure mobility		
6.2.1 Projects related to smart and interoperable mobility	ERTMS	No CBA
	ITS	No CBA
	RIS	No CBA
	SESAR common projects	No CBA
	SESAR other projects	No CBA
	Transport interoperability	No CBA
6.2.2 Projects related to sustainable and multimodal mobility	Alternative fuels infrastructure	Implementing Partner: No CBA Others: Simplified CBA
	Motorways of the Seas	Full CBA / Simplified < 10 m€ *
	Multimodal passenger hubs	Full CBA / Simplified < 10 m€ *
	Reduction of rail freight noise	No CBA
6.2.3 Projects related to safe and secure mobility	Safe and secure parking infrastructure	Full CBA / Simplified < 10 m€ *
	Road safety	Full CBA / Simplified < 10 m€ *
	Projects improving transport infrastructure resilience	Full CBA / Simplified < 10 m€ *
	External border checks	Full CBA / Simplified < 10 m€ *
6.3 Military mobility		
	Military mobility	No CBA

Adaptation to CEF

“Guidance on Economic Appraisal for CEF Transport projects”

Note on Scope of Socio-Economic Assessment



2019 CEF Transport call for proposals ✓ Cost-Benefit Analysis checklist

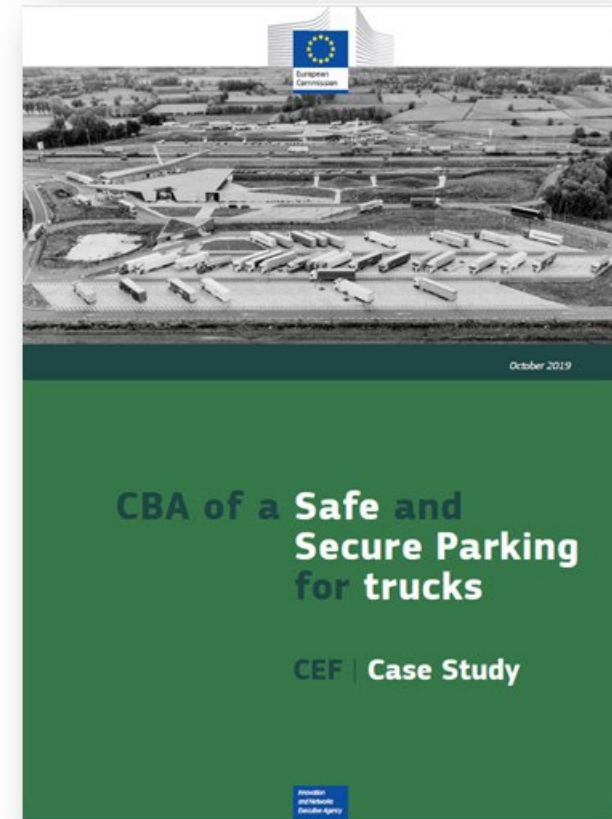
This checklist will help you to fully address the qualitative and quantitative requirements of the 2019 CEF Transport call related to the Cost-Benefit Analysis (CBA). By reminding you of some of the key points assessed during the evaluation process and the necessary elements to be included in the CBA, the checklist aims to help you increase your chances of being granted CEF Transport funding.

You may use it to estimate how well you feel you have addressed the requirements listed therein. For questions about the 2019 CEF Transport call for proposals, it is recommended to periodically consult the FAQ page on the INEA website or contact us: INEA-CEF-transport-calls@ec.europa.eu. Questions will be answered via FAQ.

Cost-Benefit Analysis

Did you...?

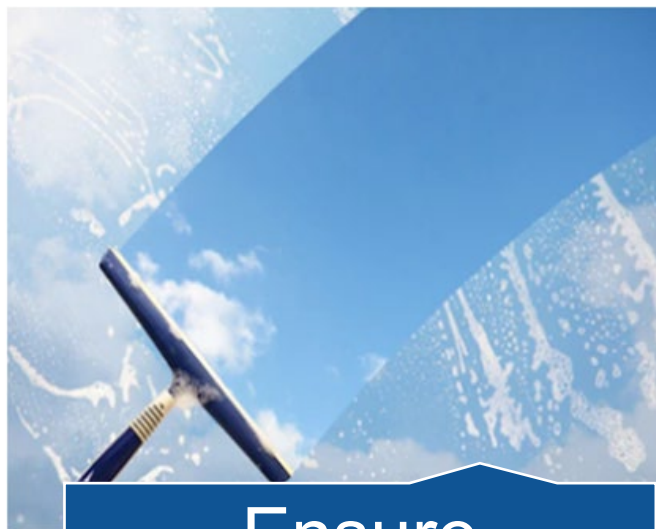
1. Make sure that the CBA was carried out for a scope that meets the definition of Single Unit of Assessment of the DG REGIO methodology (page 32), and that such unit is clearly defined in your CBA Y N
2. Make sure that you have listed and detailed all deviations from the scope of the CBA in comparison to the Action Y N
3. Clearly distinguishing cash flows related to the factual scenario from cash flows relating to the counterfactual scenario Y N
4. Justify the reference period if you have retained a number of years different than the recommended one Y N
5. Justify the discount rate in accordance with the Guide for Applicants if you have retained a value higher than the recommended ones (for the financial analysis 4% and for the economic analysis 5% for Cohesion Member States and 3% for other Member States) Y N
6. Make sure that the CBA Financial Analysis uses a consolidated approach in Y N



Objectives of the Cash Flow Template



Ensure quality



Ensure
Transparency



Simplify
Assessment

Latest version (2022 CEF Transport Call)

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/cef/temp-form/af/full-cba-cash-flow-template_cef-t_en.xlsx

Cash Flow Template - Input

CBA TEMPLATE NOTICE
2017 CEF BLENDING CALL - 2nd Cut Off

- This template is meant to support applicants in the presentation of results of the Cost Benefit Analysis in a common and simplified format and facilitate the verification of CBA analyses. The use of this template is not mandatory. The provision of a CBA report, along with your application, remains required and this template shall not substitute such report.
- Because the findings of the CBA report will prevail, divergences in comparison to the CBA study are acceptable (e.g. due to the introduction of rounded values or limitations of this template). Material discrepancies should however be explained in the Comment section of the "Input Sheet". If the CBA study includes different scenarios please fill the template using the data that were used for the determination of the CEF funding requested.
- This excel template is structured in 4 data sheets plus this Notice. The "Input Sheet" is where applicants fill in the values sourced from their CBA study; The 3 other sheets are Output Sheets ("Economic Analysis", "Financial Analysis" and "Funding Gap") and they present the results of the analyses. These Output sheets are presented in order to help you identifying material discrepancies with other parts of your application.
- The results on the Output Sheet will only appear when all data in "Input Sheet" are in the appropriate format. Indeed, this template performs some checks to make sure that there are no mistakes in the fields filled in by the applicant. The mistakes that are checked by the template are systematically spelled out together with the explanation of how to fill in each cell.
- Next to the fields containing the inappropriate data the template will show a warning message: Warning. Just below the heading of each section there is a summary of the various tests specifying if:
 - all the data is in the appropriate format Ok
 - there are mistakes that need to be corrected Please Correct
- The template is protected and the applicant can **insert values and text only in some predefined cells of the "Input Sheet" marked in yellow**. The Output sheets are fully blocked and editing is not possible. Yet, for transparency and comparability purposes, it is possible to see the unblocked cells.
- If you encounter a difficulty in filling out this template you may send a question to: INEA-CEF-TRANSPORT-BLENDING@ec.europa.eu

2017 CEF BLENDING CALL - 2nd Cut Off
Proposal code: 2017-XX-TM-0000-W

MAIN ASSUMPTIONS OF THE ANALYSIS

Ok

Reference period (n of years)	10	
First year in the reference period	2018	
Last year in the reference period	2027	
Social Discount Rate (%)		for economic analysis
Financial Discount Rate (%)		for financial analysis

INCREMENTAL INVESTMENT COSTS

Ok

Initial investment

Capital expenditure item/category	Conversion Factor														
	for economic analysis	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
		-													
		-													
		-													
		-													
		-													
		-													
		-													
		-													
		-													
Total															
	for financial analysis	-													
	for economic analysis	-													



Replacement costs



Replacement costs	Conversion Factor		Total	2018
	for economic analysis	Total		
	0.78	10,000,000		-
	↑			↑
F46				I46

Cell F46 Please specify the Conversion Factor applicable to the replacement costs. At least, corrections should be applied to the conversion factor for excise tax on import. CBAs that do not make any correction to the financial value of the project should use a conversion factor of 1. If the conversion factor is not fixed for the whole reference period please specify the Conversion Factors. It is not possible to insert text in this cell.

Cell I46 Please insert in this and the following columns (J46, K46, L46, M46, N46, O46, P46, Q46, R46, S46, T46) replacement costs meant to replace shot-life machinery and/or equipment. Additional guidance can be found on the DG REGIO methodology. It is not possible to insert text or negative values in this period (the year in cell G13) are disregarded.

Cash Flow Template - Output

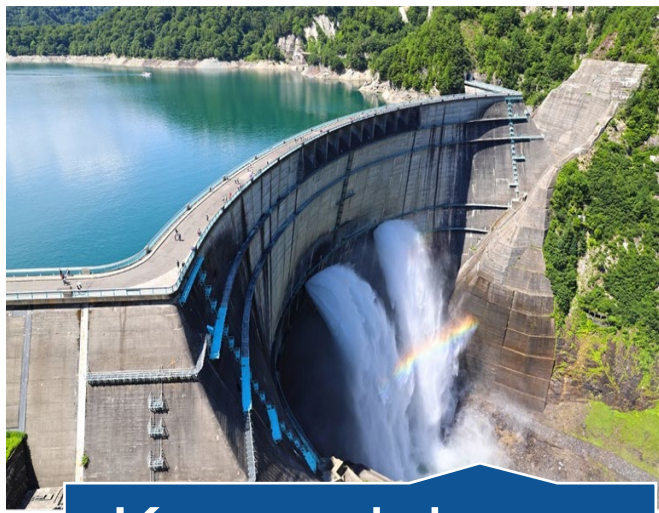
 2017 CEF BLENDING CALL - 2nd Cut Off Economic Analysis Proposal code: 2017-XX-TM-0000-W											
	NPV @ 0.0%	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Project investment cost	-	-	-	-	-	-	-	-	-	-	-
Replacement cost	-	-	-	-	-	-	-	-	-	-	-
Project O&M costs	-	-	-	-	-	-	-	-	-	-	-
Residual value of investment	-	-	-	-	-	-	-	-	-	-	-
Total economic costs	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
Total economic benefits	-	-	-	-	-	-	-	-	-	-	-
ENPV / Net benefits	-	-	-	-	-	-	-	-	-	-	-
ERR	#NUM!										
B/C RATIO	#DIV/0!										

 2017 CEF BLENDING CALL - 2nd Cut Off Financial Analysis Proposal code: 2017-XX-TM-0000-W												
Return on investment before CEF		NPV @ 0.0%	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Project investment cost	-	-	-	-	-	-	-	-	-	-	-	-
Replacement cost	-	-	-	-	-	-	-	-	-	-	-	-
Project O&M costs	-	-	-	-	-	-	-	-	-	-	-	-
Total revenues	-	-	-	-	-	-	-	-	-	-	-	-
Residual value of investment	-	-	-	-	-	-	-	-	-	-	-	-
FNPV(C)	-	-	-	-	-	-	-	-	-	-	-	-
FRR(C)	#NUM!											

Objectives of the Simplified CBA calculator



Reduce burden



Keep minimum
quality



Common tool

Latest version (2022 CEF Transport Call)

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/cef/temp-form/af/simplified-cba-calculator_cef-t_en.xlsm

Simplified CBA

- The simplification consists in
 - dropping the requirement for the standalone text document, and
 - replacing the CBA Cash Flow template with the simplified CBA excel calculator
- The simplified CBA calculator requires fewer inputs to produce the output indicators by automating the calculation of externalities and the monetisation of time saving.
- When a simplified CBA is required applicants may always submit a full CBA if they wish so (but then they have to respect those requirements).

Simplified CBA calculator

- It is important to configure correctly the calculator for relevant sector, for example: CEF Transport calls.
- Other options are available: economic appraisal method and calculation of financial performance indicators – to be reflected in the general assumption sheet (“G.Asm”).

	Cell	Appearance
Select “Transport sector”	F11	Sector <input type="text" value="Transport"/>
Select “Cost Benefit Analysis”	F13	Economic appraisal method <input type="text" value="Cost-benefit analysis"/>
Activate “Financial analysis”	F75	Do you want to calculate the financial performance indicators? <input type="button" value="Yes"/>

Simplified CBA – Transport sheet

ACCIDENTS

2020-cent per passenger*km or tonne*km	2020-cent per vehicle*km
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Values not applicable

- : No railway in CY and MT
- : No high speed rail in AT, BG, CY, CZ, DK, EE, EL, FI, HR, HU, IE, LT, LV, LU, MT, PL, PT, SK, SI, SE
- : No electric rail freight in EE, LT, LV
- : No inland water ways in CY, DK, EL, IE, LT, LV, MT, PT, SI, SE
- : No access to sea AT, CZ, HU, SK

Values not available (potentially available in future versions of the tool)

- n.a. No maritime values (tkm nor vkm)

NB

Aviation data are provided only at European (EU27) level

		[Road] car (petrol) ptkm	[Road] car (diesel) ptkm	[Road] car (total) ptkm	[Road] bus ptkm	[Road] coach ptkm	[Road] motorcycle ptkm	[Road] light commercial vehicle (petrol) ptkm	[Road] light commercial vehicle (diesel) ptkm	[Road] heavy goods vehicle ptkm	[Road] average passenger vehicle ptkm	[Road] average goods vehicle ptkm
		Average costs (2020-cent per pkm or tkm)										
		Pass car petrol	Pass car diesel	Pass car total	Bus	Coach	MC	LCV-petrol	LCV-diesel	HGV	Passenger vehicles	Goods vehicles
EU-27	EU	4,82	4,82	4,82	0,92	0,92	12,85	6,79	6,79	1,32	4,67	2,08
Austria	AT	9,30	9,30	9,30	1,58	1,58	64,95	6,96	6,96	2,33	9,43	3,43
Belgium	BE	5,94	5,94	5,94	1,88	1,88	17,40	12,78	12,78	2,64	5,65	5,02
Bulgaria	BG	2,82	2,82	2,82	0,52	0,52	34,52	0,03	0,03	0,89	2,55	0,85
Croatia	HR	7,37	7,37	7,37	1,40	1,40	14,21	2,81	2,81	1,43	7,00	1,86
Cyprus	CY	3,00	3,00	3,00	0,43	0,43	8,17	5,86	5,86	1,45	2,72	3,55
Czech Repu	CZ	5,03	5,03	5,03	1,04	1,04	8,39	4,26	4,26	1,38	4,43	1,69
Denmark	DK	2,63	2,63	2,63	0,65	0,65	11,60	1,72	1,72	1,66	2,55	1,68
Estonia	EE	2,72	2,72	2,72	1,92	1,92	5,56	0,10	0,10	0,33	2,56	0,31
Finland	FI	1,59	1,59	1,59	0,57	0,57	7,40	3,39	3,39	1,11	1,58	1,41

AIR POLLUTION

2020-cent per passenger*km or tonne*km	2020-cent per vehicle*km
--	--------------------------

Values not applicable

- : No railway in CY and MT
- : No high speed rail in AT, BG, CY, CZ, DK, EE, EL, FI, HR, HU, IE, LT, LV, LU, MT, PL, PT, SK, SI, SE
- : No electric rail freight in EE, LT, LV
- : No inland water ways in CY, DK, EL, IE, LT, LV, MT, PT, SI, SE
- : No access to sea AT, CZ, HU, SK

NB

Maritime data is provided only at European (EU27) level

Aviation data is provided only at European (EU27) level

		[Road] coach ptkm	[Road] motorcycle ptkm	[Road] light commercial vehicle (petrol) ptkm	[Road] light commercial vehicle (diesel) ptkm	[Road] heavy goods vehicle ptkm	[Road] average passenger vehicle ptkm	[Road] average goods vehicle ptkm
		Average costs (2020-cent per pkm or tkm)						
		Coach	MC	LCV-petrol	LCV-diesel	HGV	Passenger vehicles	Goods vehicles
EU-27		0,72	1,16	1,77	4,66	0,76	0,71	0,93
Austria		1,28	2,13	1,15	8,86	0,99	1,31	1,08
Belgium		0,95	2,47	2,51	5,14	1,24	1,37	1,55
Bulgaria		0,56	0,34	0,45	2,25	0,53	0,63	0,54
Croatia		0,68	0,95	0,53	2,62	0,79	0,75	0,73
Cyprus		0,29	0,16	0,59	3,40	0,48	0,16	0,60
Czech Repu		1,09	1,47	4,43	9,10	1,55	1,09	1,91
Denmark		0,50	0,89	0,58	2,50	0,81	0,51	0,78
Estonia		0,27	0,00	1,03	2,36	0,24	0,49	0,31
Finland		0,25	0,42	1,00	3,28	0,33	0,32	0,43
France		1,01	1,01	2,93	7,76	1,02	1,05	1,54
Germany		1,10	1,85	1,24	9,45	1,13	0,83	1,16
Greece		0,28	0,27	0,68	3,06	0,41	0,29	0,79
Hungary		0,85	1,31	5,94	5,79	1,00	0,65	1,53
Ireland		0,64	0,84	0,49	3,23	0,48	0,65	0,49
Italy		0,77	1,39	3,62	6,71	1,15	0,81	1,84
Latvia		0,29	0,66	0,41	1,65	0,48	0,64	0,48

Keep in touch - CINEA



cinea.ec.europa.eu/



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More Information

For info or further questions on this webinar please contact the JASPERS Networking Platform team:

jaspersnetwork@eib.org

JASPERS Knowledge Sharing and Networking Platform:

<https://jaspers.eib.org/knowledge/index>

JASPERS Website:

jaspers.eib.org

