



SCREEN

Synergic Circular
Economy across
European regions



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Assessment Criteria for Circular Economy Projects

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BACKGROUND

Increasing relevance of Circular Economy in Europe

Specific assessment criteria for circular economy projects are still missing.

There could be some difficulties in evaluating circular economy projects by adopting existing criteria for regional funds

Additional specific criteria will help in building a clear ranking list



Methodology

First discussion within the SCREEN Policy Lab.

Hypothesis with four criteria, further discussion and test with some already financed projects

Draft table of assessment criteria

Online questionnaire open to external stakeholders, collect and analyze feedbacks

Further discussion, check with Commission services, ECESP and major stakeholders

Presentation of the final version at one SCREEN event



DRAFT TABLE OF ASSESSMENT CRITERIA FOR CIRCULAR ECONOMY PROJECTS

Projects dealing with waste recycling or reduction should select one of the cases indicated in the rows from 1 to 4 and provide the requested data . Then data can be provided fo criteria 5, 6 nd 7.

Indirect projects (such as supporting actions) should only provide data for criteria 8, 9 and 10

Select only one among the four

1	2	3	4	5	6	7	8	9
	N.	Description	Explanation	Metrics	Additional parameters	Assessment indicator	Weight	Data that should be provided by the applicants
Environmental Criteria (choose only one criterion among 1, 2, 3 and 4)	1	Mass of waste resources recovered and re-introduced in the own production cycle, or	Waste recovered is re-used in the same location as a secondary raw material	Kg/year	Economic value of the secondary raw material (€/Kg)	Metrics x additional parameter (€/year)	10	Description of the new process with a clear demonstration of quantity, quality and economic value of the waste re-used in the same location
	2	Industrial symbiosis: Mass of waste resources recovered and re-introduced in another production cycle, or	Waste recovered is re-used in another location as a secondary raw material	Kg/year			9	Description of the new process with a clear demonstration of quantity and quality of the waste recovered, AND statement of the owner of the other process that buys the secondary raw material at the described cost
	3	Increase in the recyclability of waste generated, or	Waste recovered is put on the market as a secondary raw material	Kg/year			8	Description of the new process with a clear demonstration of quantity, quality and economic value of the waste recovered
	4	Avoidance of waste generated	The new process generates less waste	Kg/year	Cost of disposal (€/Kg)	Metrics x additional parameter (€/year)	7	Description of the new process with a clear demonstration of quantity, quality and economic value of the waste re-used in the same location
	5	"Net Energy balance respect to the previous system" or "Amount of energy recovered"	The new process consumes less energy or same energy of th new process is recovered	Kwh/year	Cost of Energy (€/KWh)		6	Description of the new process with a clear demonstration of the quantity of energy saved or recovered
	6	Reduction of emissions	The new process has less emissions respect to the old one	CO2 Kg/year (*)			6	Comparative description of the old and new processes, with a clear justification of CO2 remission reduction(*)
Social Criterion	7	Net balance of jobs	Number of new jobs created by the circular economy project, minus the number of jobs lost in the previous linear process	Number of full time working units		Metrics (number of full time working units: in case of part time units decimals should be used)	6	Comparative description of the old and new processes, with a clear justification for new jobs created and old job lost. In case of no jobs lost a description of the new tasks for workers previously working at the old process should be provided
Economic Criterion	8	Increase of economic value (lyfe cycle)	Ratio of economic value of the new process respect to the previous one	%		Metrics (%)	6	Comparative description of the old and new processes, with a clear justification of the increased economic value, if any
Criteria for indirect projects	9	Project promoting waste recycling					From 1 to 5	Score assigned by the evaluators on the basis of the information contained in the project proposal : 0 = not complying with the criterion; 1 = poor; 2 = fair; 3 = good; 4 = very good; 5 =excellent
	10	Implementation of "green procurement" in the project					From 1 to 5	
	11	Inclusion of relevant stakeholders education on circular economy					From 1 to 5	

(*) In case of other pollutants, a table of equivalence should be used to convert them into CO2 equivalent emissions - <https://climatechangeconnection.org/emissions/co2-equivalents/>

Projects dealing with a production process

Projects dealing with the promotion of circular economy

Physical flow of waste: choose among four options

1	2	3	4	5	6	7	8
	N.	Description	Explanation	Metrics	Additional parameters	Assessment indicator	Weight
Environmental Criteria <i>only one criterion among 1, 2, 3 and 4)</i>	1	Mass of waste resources recovered and re-introduced in <u>the own production cycle</u> , or	Waste recovered is re-used in the same location as a secondary raw material	Kg/year	Economic value of the secondary raw material (€/Kg)	Metrics x additional parameter (€/year)	10
	2	Industrial symbiosis: Mass of waste resources recovered and re-introduced in another production cycle, or	Waste recovered is re-used in another location as a secondary raw material	Kg/year			9
	3	Increase in the recyclability of waste generated, or	Waste recovered is put on the market as a secondary raw material	Kg/year			8
	4	Avoidance of waste generated	The new process generates less waste	Kg/year	Cost of disposal (€/Kg)		7

Physical flow of waste: two further environmental criteria

5	"Net Energy balance respect to the previous system" or "Amount of energy recovered"	The new process consumes less energy or same energy of th new process is recovered	Kwh/year	Cost of Energy (€/KWh)	Metrics x additional parameter (€/year)	6
6	Reduction of emissions	The new process has less emissions respect to the old one	CO2 Kg/year (*)		Metrics (CO2 Kg/year)	6

Greenhouse Gas	Formula	100-year GWP (AR4)
Carbon dioxide	CO ₂	1
Methane	CH ₄	25
Nitrous oxide	N ₂ O	298
Sulphur hexafluoride	SF ₆	22,800
Hydrofluorocarbon-23	CHF ₃	14,800
Hydrofluorocarbon-32	CH ₂ F ₂	675
Perfluoromethane	CF ₄	7,390
Perfluoroethane	C ₂ F ₆	12,200
Perfluoropropane	C ₃ F ₈	8,830
Perfluorobutane	C ₄ F ₁₀	8,860
Perfluorocyclobutane	c-C ₄ F ₈	10,300
Perfluoropentane	C ₅ F ₁₂	13,300
Perfluorohexane	C ₆ F ₁₄	9,300

NOTE: The **GWP values were changed in 2007**. The values in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (**AR4**) in 2007 where refined from the IPCC Second Assessment Report (**SAR**) values used previously and still in much of the literature.

(*) In case of other pollutants, a table of equivalence should be used to convert them into CO2 equivalent emissions

<https://climatechangeconnection.org/emissions/co2-equivalents/>

Social criterion

N.	Description	Explanation	Metric	Additional parameters	Indicator	Weight
7	Net balance of jobs	Number of new jobs created by the circular economy project, minus the number of jobs lost in the previous linear process	Number of full working units		Metrics (number of full time working units: in case of part time units decimals should be used)	6

Economic criterion

N.	Description	Explanation	Metric	Additional parameters	Indicator	Weight
8	Increase of economic value (life cycle)	Ratio of economic value of the new process respect to the previous one	%		Metrics (%)	6

Criteria for indirect projects	N.	Description	Explanation	Metric	Additional parameters	Indicator	Weight
	9	Project promoting waste recycling					From 1 to 5
	10	Implementation of “green procurement” in the project					From 1 to 5
	11	Inclusion of relevant stakeholders education on circular economy					From 1 to 5

Projects dealing with waste recycling or reduction should select one of the case

Indirect projects (such as supporting actions) should only provide data for crite

1	2	3	4
	N.	Description	Explanation
Environmental Criteria (each project can indicate only one criterion among 1, 2, 3 and 4)	1	Mass of waste resources recovered and re-introduced in the own production cycle, or	Waste recovered is re-used in the same location as a secondary raw material
	2	Industrial symbiosis: Mass of waste resources recovered and re-introduced in another production cycle, or	Waste recovered is re-used in another location as a secondary raw material
	3	Increase in the recyclability of waste generated, or	Waste recovered is put on the market as a secondary raw material
	4	Avoidance of waste generated	The new process generates less waste
	5	"Net Energy balance respect to the previous system" or "Amount of energy recovered"	The new process consumes less energy or same energy of the new process is recovered
	6	Reduction of emissions	The new process has less emissions respect to the old one
Social Criterion	7	Net balance of jobs	Number of new jobs created by the circular economy project, minus the number of jobs lost in the previous linear process
Economic Criterion	8	Increase of economic value (life cycle)	Ratio of economic value of the new process respect to the previous one
Criteria for indirect projects	9	Project promoting waste recycling	
	10	Implementation of "green procurement" in the project	
	11	Inclusion of relevant stakeholders education on circular economy	

(*) In case of other pollutants, a table of equivalence should be used to convert

Monitoring Framework -COM(2018) 29 final

No	Name	Relevance	EU levers (examples)
Production and consumption			
1	EU self-sufficiency for raw materials	The circular economy should help to address the supply risks for raw materials, in particular critical raw materials.	Raw Materials Initiative; Resource Efficiency Roadmap
2	Green public procurement*	Public procurement accounts for a large share of consumption and can drive the circular economy.	Public Procurement Strategy; EU support schemes and voluntary criteria for green public procurement
3a-c	Waste generation	In a circular economy waste generation is minimised.	Waste Framework Directive; directives on specific waste streams; Strategy for Plastics
4	Food waste*	Discarding food has negative environmental, climate and economic impacts.	General Food Law Regulation; Waste Framework Directive; various initiatives (e.g. Platform on Food Losses and Food Waste)
Waste management			
5a-b	Overall recycling rates	Increasing recycling is part of the transition to a circular economy.	Waste Framework Directive
6a-f	Recycling rates for specific waste streams	This reflects the progress in recycling key waste streams.	Waste Framework Directive; Landfill Directive; directives on specific waste streams
Secondary raw materials			
7a-b	Contribution of recycled materials to raw materials demand	In a circular economy, secondary raw materials are commonly used to make new products.	Waste Framework Directive; Eco-design Directive; EU Ecolabel; REACH; initiative on the interface between chemicals, products and waste policies; Strategy for Plastics; quality standards for secondary raw materials
8	Trade in recyclable raw materials	Trade in recyclables reflects the importance of the internal market and global participation in the circular economy.	Internal Market policy; Waste Shipment Regulation; Trade policy
Competitiveness and innovation			
9a-c	Private investments, jobs and gross value added	This reflects the contribution of the circular economy to the creation of jobs and growth.	Investment Plan for Europe; Structural and Investment Funds; InnovFin; Circular Economy Finance Support Platform; Sustainable Finance Strategy; Green Employment Initiative; New Skills Agenda for Europe; Internal Market policy
10	Patents	Innovative technologies related to the circular economy boost the EU's global competitiveness.	Horizon 2020

Thank you for your Attention!

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