



Eco-design assessment

assess

product

service

circular strategy



30-45 min



1-4 people



(online)
survey

Understand the negative impact and potential for improvement by assessing the current solution and identifying opportunities. This tool can be used in different ways: to assess a benchmark or the current product or services or to compare ideas and concepts against a current solution.

Description

Try to answer each question and rely on the knowledge of the team. If used as a benchmark comparison, choose the best option available in the market e.g. from an environmental or usability point of view. Not every question may be applicable for every product or service - mark n.a. in this case. If an answer needs clarification go with a gut feeling or the swarm intelligence and note down the question, they might be a relevant hint for room for improvement. The tool can also be used to counter check a potential concept or idea. By answering the questions, it can assure all life stages are taken into account and interferences are eliminated.

For Facilitators

This tool is often used in two phases of a workshop or a design sprint: discovery and deliver. By answering the questions early in the process, many design principles are brought up and a first understanding for room for improvement is created. In a later phase of the process the assessment can help to review a concept or idea for its actual (positive) impact and potential flaws. Depending on the product, the benchmark and the sector, some of the questions might be hard to answer without investigation. This can already be a hint for further research questions. In a workshop setting, refer to the swarm intelligence and let the participants answer by rule of thumb.

Ecodesign Assessment (Services)



PHASE 1 - DESIGN

Can the service replace a product (or product ownership)?

Could product maintenance be a service?

Could access to parts and instructions for repair, refurbishment, and reuse be a service?

Is it possible to upgrade, is it up- and downwards compatibility, ...)?

Could a service reduce/replace the desire for other products?

Could a service make complicated processes throughout the life cycle convenient?

Could a service promote positive behaviour change ?

Is software build in slim, compatible ways?

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Σ sum of answers
multiply by

x0 x1 x2 x3

is Σ sum x Points

+ + + =

Score

÷ (8-) =



PHASE 2 -RESOURCES

Could a service unlock unused resources or stock?

Could a service support sourcing for used products/materials?

Could a service support using recycled/recyclable materials?

Is data tracked/available throughout the entire supply chain or even life cycle?

Could a service support proper handling of materials for after use?

Σ sum of answers
multiply by

x0 x1 x2 x3

is Σ sum x Points

+ + + =

Score

÷ (5-) =

Ecodesign Assessment (Services)



PHASE 3 - MANUFACTURING

Could a service reduce/avoid auxiliaries and operational materials (water, air, oil,...)?

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Could a service help avoiding waste during manufacturing?

Could a service support finding industrial synergies and partners?

Could a service allow for waste-streams (also waste water or lost heat) to be used as a resource for other nearby companies (industrial symbiosis)?

Could a service support exchange between suppliers?

Could a service support energy-efficient production?

Σ sum of answers
multiply by

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
x0	x1	x2	x3	

is Σ sum x Points

+ + + =

Score

÷ (7 -) =



PHASE 4 - DISTRIBUTION

Could a service improve logistics?(from material extraction, within supply chain, last mile delivery)

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Are logistics organized climate neutrally?

Could a service organize decentralized logistics?

Is a reverse logistics for end of (first) life in place?

Could a service open up climate neutral distribution channels?

Could a service compare/ inform about environmental advantages?

Could a service reduce packaging or make packaging reusable?

Σ sum of answers
multiply by

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
x0	x1	x2	x3	

is Σ sum x Points

+ + + =

Score

÷ (7 -) =

Ecodesign Assessment (Services)



PHASE 5 -USE

Could a service incentivize sharing?

Could a service encourage environmental friendly usage ? (energy saving, maintenance)

Could a service reduce the amount of consumables?

Could a service provide (or inform about) maintenance ?

Could a service incentivize environmentally friendly behaviour?

Are upgrades available and easy to "install"

Is data provided/collected for constant improvement?

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Σ sum of answers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
multiply by	x0	x1	x2	x3	
<hr/>					
is Σ sum x Points	+	+	+	=	<input type="text"/>
<hr/>					
Score	<input type="text"/>	÷ (6-	<input type="text"/>)=	<input type="text"/>



PHASE 6 -AFTER USE

Could a service provide/ support repair?

Could a service incentivize repair/re-use/re-buy options?

Could a service provide product information for recycling/refurbishing companies?

Could a service instruct for safe disposal options?

Could a service inform about re-use options?

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Σ sum of answers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
multiply by	x0	x1	x2	x3	
<hr/>					
is Σ sum x Points	+	+	+	=	<input type="text"/>
<hr/>					
Score	<input type="text"/>	÷ (5-	<input type="text"/>)=	<input type="text"/>

Ecodesign Assessment (Services)



BUSINESS MODEL

Is the product-service-system co-created with customers, suppliers and the whole circular business network ?

Do services increase positive environmental impact throughout the entire business network.?

Are environmental and social measured for cost-benefit analysis (beside financial aspects)?

Could data/insights/services help network partners to increase their sustainability?

Is a secondary market (after-market) part of the business model?

Not at all
Unlikely
Likely
Definitely
Unknown
N/A

Σ sum of answers
multiply by

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
x0	x1	x2	x3	
				<input type="text"/>
is Σ sum x Points				
	+	+	+	= <input type="text"/>
Score	<input type="text"/>	÷ (4- <input type="text"/>)=	<input type="text"/>



FINAL SCORE

Mark the scores of each phase in the chart and connect the dots. What is doing good, where is room for improvement?

