

# Circular Economy Ontology Network (CEON) - Process Module

## Metadata

### IRI

<http://w3id.org/CEON/ontology/process/>

### Title

Circular Economy Ontology Network (CEON) - Process Module

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Onto-DESIDE

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### Version Iri

<http://w3id.org/CEON/ontology/process/0.5/>

### Version Info

0.5

### Prior Version

0.4

### Preferred Namespace Prefix

ceon-process

### Preferred Namespace Uri

<https://w3id.org/CEON/ontology/process/>

### Description

The Process module of CEON (Circular Economy Ontology Network).

### Covers Requirements

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.1: T8-2.

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.2: T8-2.

## Classes

<b>Energy</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/energy/Energy">http://w3id.org/CEON/ontology/energy/Energy</a>
<b>Sub Class Of</b> <a href="#">resourceODP:Resource</a> <sup>C</sup>
<b>In Range Of</b> <a href="#">needsEnergy</a> <sup>op</sup>
<b>Assembling Process</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/AssemblingProcess">http://w3id.org/CEON/ontology/process/AssemblingProcess</a>
<b>Sub Class Of</b> <a href="#">TransformationProcess</a> <sup>C</sup>
<b>Buy Resource Process</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/BuyResourceProcess">http://w3id.org/CEON/ontology/process/BuyResourceProcess</a>
<b>Sub Class Of</b> <a href="#">processODP:Process</a>
<b>Co2Emission</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/C02Emission">http://w3id.org/CEON/ontology/process/C02Emission</a>
<b>Sub Class Of</b> <a href="#">resourceODP:Resource</a> <sup>C</sup>
<b>In Range Of</b> <a href="#">producesCO2</a> <sup>op</sup>
<b>Catalyst</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/Catalyst">http://w3id.org/CEON/ontology/process/Catalyst</a>
<b>Sub Class Of</b> <a href="#">resourceODP:Resource</a> <sup>C</sup>
<b>In Range Of</b> <a href="#">usesCatalyst</a> <sup>op</sup>
<b>Change Resource Process</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/ChangeResourceProces">http://w3id.org/CEON/ontology/process/ChangeResourceProces</a> s
<b>Sub Class Of</b> <a href="#">TransformationProcess</a> <sup>C</sup>
<b>Contact Process</b> <sup>C</sup>
<b>IRI</b> <a href="http://w3id.org/CEON/ontology/process/ContactProcess">http://w3id.org/CEON/ontology/process/ContactProcess</a>
<b>Sub Class Of</b> <a href="#">processODP:Process</a>

## Deconstruction Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/DeconstructionProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Disassembling Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/DisassemblingProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Dismantle Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/DismantleProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Ensure Claim Process

**IRI** <http://w3id.org/CEON/ontology/process/EnsureClaimProcess>

**Sub Class Of** [processODP:Process](#)

## Issuing Certificate Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/IssuingCertificateProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Manufacturing Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ManufacturingProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Offset Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/OffsetProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Production Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ProductionProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Recycle Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/RecycleProcess>

**Sub Class Of** [TransformationProcess<sup>c</sup>](#)

## Refurbishment Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/RefurbishmentProcess>

**Sub Class Of** [TransformationProcess<sup>c</sup>](#)

## Remove Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/RemoveProcess>

**Sub Class Of** [processODP:Process](#)

## Remove Resource Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/RemoveResourceProces s>

**Sub Class Of** [TransformationProcess<sup>c</sup>](#)

## Repair Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/RepairProcess>

**Sub Class Of** [TransformationProcess<sup>c</sup>](#)

## Resell Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ResellProcess>

**Sub Class Of** [processODP:Process](#)

## Reuse Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ReuseProcess>

**Sub Class Of** [processODP:Process](#)

## Sell Resource Process<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/process/SellResourceProcess>

**Sub Class Of** [processODP:Process](#)

## Service Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ServiceProcess>

**Sub Class Of** [TransformationProcess<sup>C</sup>](#)

## Share Resource Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/ShareResourceProcess>

**Sub Class Of** [processODP:Process](#)

## Take Back Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/TakeBackProcess>

**Sub Class Of** [processODP:Process](#)

## Transformation Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/TransformationProces s>

**Is Defined By** ISO 59004:2024 - 3.5.5 process

**Description** Set of interrelated or interacting activities that transforms inputs into outputs.

**Sub Class Of** [processODP:Process](#)

**Super Class Of**

[AssemblingProcess<sup>C</sup>](#)  
[ChangeResourceProcess<sup>C</sup>](#)  
[DeconstructionProcess<sup>C</sup>](#)  
[DisassemblingProcess<sup>C</sup>](#)  
[DismantleProcess<sup>C</sup>](#)  
[IssuingCertificateProcess<sup>C</sup>](#)  
[ManufacturingProcess<sup>C</sup>](#)  
[OffsetProcess<sup>C</sup>](#)  
[ProductionProcess<sup>C</sup>](#)  
[RecycleProcess<sup>C</sup>](#)  
[RefurbishmentProcess<sup>C</sup>](#)  
[RemoveResourceProcess<sup>C</sup>](#)  
[RepairProcess<sup>C</sup>](#)  
[ServiceProcess<sup>C</sup>](#)

## Transition<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/process/Transition>

**Sub Class Of** [processODP:Situation](#)

**In Domain Of** [affectsObject<sup>op</sup>](#)

## Event<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/Event>

## Resource<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/resourceODP/Resource>

**In Range Of** [resultingResource<sup>op</sup>](#)

**Super Class Of** [http://w3id.org/CEON/ontology/energy/Energy<sup>c</sup>](http://w3id.org/CEON/ontology/energy/Energy_c)  
[CO2Emission<sup>c</sup>](#)  
[Catalyst<sup>c</sup>](#)

## Object Properties

### affects object<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/process/affectsObject>

**Sub Property Of** [processODP:isSettingFor](#)

**Domain** [Transition<sup>c</sup>](#)

### needs energy<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/process/needsEnergy>

**Sub Property Of** [processODP:hasInput<sup>op</sup>](#)

**Range** [http://w3id.org/CEON/ontology/energy/Energy<sup>c</sup>](http://w3id.org/CEON/ontology/energy/Energy_c)

### produces co2<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/process/producesCO2>

**Sub Property Of** [processODP:hasOutput<sup>op</sup>](#)

**Range** [CO2Emission<sup>c</sup>](#)

### resulting resource<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/process/resultingResource>

**Sub Property Of** [processODP:hasOutput<sup>op</sup>](#)

**Range** [resourceODP:Resource<sup>c</sup>](#)

[uses catalyst<sup>op</sup>](#)

**IRI** <http://w3id.org/CEON/ontology/process/usesCatalyst>

**Sub Property Of** [processODP:hasInput<sup>op</sup>](#)

**Range** [Catalyst<sup>c</sup>](#)

[has input<sup>op</sup>](#)

**IRI** <http://w3id.org/CEON/ontology/processODP/hasInput>

**Super Property Of**

- [needsEnergy<sup>op</sup>](#)
- [usesCatalyst<sup>op</sup>](#)

[has output<sup>op</sup>](#)

**IRI** <http://w3id.org/CEON/ontology/processODP/hasOutput>

**Super Property Of**

- [producesCO2<sup>op</sup>](#)
- [resultingResource<sup>op</sup>](#)

## Namespaces

:

**dctypes** <http://w3id.org/CEON/ontology/process/>

**dcterms** <http://purl.org/dc/terms/>

**odp** <http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#>

**owl** <http://www.w3.org/2002/07/owl#>

**processODP** <http://w3id.org/CEON/ontology/processODP/>

**prov** <http://www.w3.org/ns/prov#>

**rdf** <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

**rdfs** <http://www.w3.org/2000/01/rdf-schema#>

**resourceODP** <http://w3id.org/CEON/ontology/resourceODP/>

**vann** <http://purl.org/vocab/vann/>

## Legend

