Circular Economy Ontology Network (CEON) - Process Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Process Module

Publisher

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

Energy ^c

Sub Class Of resourceODP:ResourceC

In Range Of needsEnergy op

Assembling Process^C

Sub Class Of <u>TransformationProcess</u>^c

Buy Resource Process^C

IRI http://w3id.org/CEON/ontology/process/BuyResourceProcess

Sub Class Of processODP:Process

Co2Emission^C

IRI http://w3id.org/CEON/ontology/process/CO2Emission

Sub Class Of resourceODP:Resource^C

In Range Of produces CO2 op

Catalyst ^C

Sub Class Of resourceODP:Resource^C

In Range Of usesCatalyst op

Change Resource Process ^C

S

Sub Class Of <u>TransformationProcess</u>^C

Contact Process ^C

Sub Class Of processODP:Process

Deconstruction Process^C

IRI http://w3id.org/CEON/ontology/process/DeconstructionProces

S

Sub Class Of <u>TransformationProcess</u>^C

Disassembling Process^c

Sub Class Of <u>TransformationProcess</u>^C

Dismantle Process ^C

Sub Class Of <u>TransformationProcess</u>^C

Ensure Claim Process C

Sub Class Of processODP:Process

Issuing Certificate Process ^c

ocess

Sub Class Of <u>TransformationProcess</u>^C

Manufacturing Process^C

Sub Class Of TransformationProcess^C

Offset Process^C

Sub Class Of <u>TransformationProcess</u>^C

Production Process^C

Sub Class Of <u>TransformationProcess</u>^C

Recycle Process^C

Sub Class Of TransformationProcess^C

Refurbishment Process^C

Sub Class Of <u>TransformationProcess</u>^C

Remove Process^C

Sub Class Of processODP:Process

Remove Resource Process^C

IRI http://w3id.org/CEON/ontology/process/RemoveResourceProces

S

Sub Class Of <u>TransformationProcess</u>^C

Repair Process^C

Sub Class Of <u>TransformationProcess</u>^C

Resell Process^C

Sub Class Of processODP:Process

Reuse Process^C

Sub Class Of processODP:Process

Sell Resource Process C

Sub Class Of processODP:Process

Service Process^C

Sub Class Of TransformationProcess^C

Share Resource Process C

Sub Class Of processODP:Process

Take Back Process^C

Sub Class Of processODP:Process

Transformation Process ^C

IRI http://w3id.org/CEON/ontology/process/TransformationProces

S

Is Defined By ISO 59004:2024 - 3.5.5 process

DescriptionSet of interrelated or interacting activities that transforms inputs into outputs.

Sub Class Of processODP:Process

Super Class Of

<u>AssemblingProcess^C</u>

ChangeResourceProcess^C
DeconstructionProcess^C
DisassemblingProcess^C
DismantleProcess^C
IssuingCertificateProcess^C
ManufacturingProcess^C
OffsetProcess^C
ProductionProcess^C

RecycleProcess^c
RefurbishmentProcess^c
RemoveResourceProcess^c

RepairProcess^C
ServiceProcess^C

Transition ^c

IRI http://w3id.org/CEON/ontology/process/Transition

Sub Class Of processODP:Situation

In Domain Of affectsObject op

Resource ^c

In Range Of resultingResource op

Super Class Of

http://w3id.org/CEON/ontology/energy/Energy^c

CO2Emission^C
Catalyst^C

Event^c

Object Properties

affects object op

IRI http://w3id.org/CEON/ontology/process/affectsObject

Sub Property Of processODP:isSettingFor

Domain <u>Transition</u>^C

needs energy op

Sub Property Of processODP:hasInput^{op}

Range http://w3id.org/CEON/ontology/energy/Energy

produces co2 op

Sub Property Of processODP:hasOutput op

Range CO2Emission^C

resulting resource op

Sub Property Of processODP:hasOutput op

Range resourceODP:Resource^C

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uses catalyst op
 IRI
                    http://w3id.org/CEON/ontology/process/usesCatalyst
 Sub Property Of
                    processODP:hasInputop
 Range
                    <u>Catalyst</u><sup>c</sup>
 has input op
 IRI
                    http://w3id.org/CEON/ontology/processODP/hasInput
 Super Property Of
                       • needsEnergy<sup>op</sup>

    <u>usesCatalyst</u><sup>op</sup>

 has output <sup>op</sup>
 IRI
                    http://w3id.org/CEON/ontology/processODP/hasOutput
 Super Property Of
                       • producesCO2<sup>op</sup>
                       • resultingResource op
Namespaces
     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#
```

Legend

resourceODP

rdfs

vann

http://www.w3.org/2000/01/rdf-schema#

http://purl.org/vocab/vann/

http://w3id.org/CEON/ontology/resourceODP/

C Classes

op Object
Properties