# Circular Economy Ontology Network (CEON) - Statement Module

### Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Statement Module

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**Version Iri** 

http://w3id.org/CEON/ontology/statement/0.2/

**Version Info** 

0.2

**Preferred Namespace Prefix** 

statement

**Preferred Namespace Uri** 

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

Description

A module to represent statements of CEON resources.

### Classes

### Quantity Interval<sup>C</sup>

In Range Of

 $\underline{has Chemical Substance Threshold Used By Manufacturer}^{op}$ 

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}$ 

 $\frac{hasMassFractionForDemounting}{hasMassFractionForDisassembly}{}^{op}$ 

 $\underline{hasMassFractionOfAllDisclosedChemicalSubstance}^{op}$ 

 $\underline{hasMassFractionOfDismantableComponentsForReuseAndRecycle}^{op}$ 

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Mas}$ 

sop

 $\underline{has Mass Fraction Of PreConsumer Recycled Materials Out Of The Total Product Mass}$ 

оp

 $\underline{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}^{op}$ 

 $\underline{hasMassFractionOfProductReleasedIntoEnvironment}^{op}$ 

 $\frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{}^{op}$ 

 $\frac{hasMassFractionOfReusedPartsOutOfTheTotalProduct^{op}}{hasPostConsumerRecycledMaterialCompositionThreshold^{op}} \\ \frac{hasPreConsumerRecycledMaterialCompositionThreshold^{op}}{hasPreConsumerRecycledMaterialCompositionThreshold^{op}} \\ \frac{hasPreConsumerRecycledMaterialComposi$ 

<u>hasQuantityInterval</u>op

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

 $\underline{has Volume Fraction Of Reused Or Recirculated Water Used In Production}^{op}$ 

**Named Individuals** 

<u>0ge-0le<sup>ni</sup></u>

<u>0gt-0.001le</u><sup>ni</sup>

<u>0gt-0.01le</u><sup>ni</sup>

0gt-0.1leni

<u>0gt-10le ni</u>

0.1ge-0.1le<sup>ni</sup>

<u>1ge</u>ni

10gt-25leni

25gt-50leni

50gt-75le<sup>ni</sup>

75gt-95leni

<u>95gt-99le<sup>ni</sup></u>

99gt-100le<sup>ni</sup>

Availability <sup>C</sup>

In Range Of has Availability op

Named Individuals

<u>public</u><sup>ni</sup>

<u>secrectAgreement</u><sup>ni</sup>

### Demounting Statement <sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/DemountingStatemen

t

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of <a href="hasMassFractionForDemounting">hasMassFractionForDemounting</a> op

 ${\color{red} {\bf Super Class \ Of} \\ \underline{ {\color{blue} {\sf MFOfProductDesignedCleanlyRemovedFromFixedAssemblyAvailabilityStateme} } \\ \underline{ {\color{blue} {\sf MFOfProductDesignedCleanlyRemovedFromFixedAssemb$ 

nt<sup>c</sup>

 $\underline{\mathsf{MFOfProductDesignedCleanlyRemovedFromFixedAssemblyStatement}^{\mathtt{C}}}$ 

### Disassembly Statement<sup>C</sup>

nt

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of <a href="hasMassFractionForDisassembly">hasMassFractionForDisassembly</a>op

Super Class Of MFOfProductDesignedCleanlyRemovedFromProductAssemblyAvailabilittyState

<u>ment<sup>c</sup></u>

MFOfProductDesignedCleanlyRemovedFromProductAssemblyStatement<sup>C</sup>

### Disclosed Chemical Subtance Statement <sup>C</sup>

ubtanceStatement

Sub Class Of <u>ProductCompositionStatement</u><sup>C</sup>

 $\frac{hasChemicalSubstanceThresholdUsedByManufacturer}{hasChemicalSubstanceThresholdUsedByManufacturer}{op} \ value \ \underline{1ge^c} \ or \ \underline{hasChemicalSubstanceThresholdUsedByManufacturer}{op} \ value \ \underline{0gt-0.1le^c} \ or \ \underline{hasChemicalSubstanceThresholdUsedByManufacturer}{op} \ value \ \underline{0gt-0.001le^c} \ or \ \underline{0gt-0.001le^c}$ 

### Dismantling Statement<sup>C</sup>

nt

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of <a href="https://hasMassFractionOfDismantableComponentsForReuseAndRecycle">hasMassFractionOfDismantableComponentsForReuseAndRecycle</a> op

**Super Class Of** 

MFOfDismantlableComponentForReuseRecycledAvailabilityStatement<sup>C</sup>

 $\underline{\mathsf{MFOfDismantlableComponentForReuseRecycledStatement}^{\mathtt{C}}}$ 

### Fraction Of Renewable Energy Availability Statement<sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/FractionOfRenewabl

eEnergyAvailabilityStatement

Sub Class Of RenewableEnergyStatement<sup>C</sup>

### Fraction Of Renewable Energy Statement<sup>C</sup>

eEnergyStatement

**Sub Class Of** 

RenewableEnergyStatement<sup>C</sup>

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}\ value$ 

99gt-100le<sup>c</sup> or

<u>hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix</u><sup>op</sup> value

25gt-50le<sup>c</sup> or

hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix<sup>op</sup> value

75gt-95le<sup>c</sup> or

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}\ value$ 

Oge-Ole<sup>c</sup> or

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}\ value$ 

10gt-25le<sup>c</sup> or

<u>hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix op value</u>

Ogt-10le<sup>c</sup> or

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}\ value$ 

50gt-75le<sup>c</sup> or

 $\underline{hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix}^{op}\ value$ 

95gt-99le<sup>C</sup>

### Hazardous Substance Declaration Availability Statement<sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/HazardousSubstance

DeclarationAvailabiltityStatement

Sub Class Of ProductCompositionStatement<sup>C</sup>

### Hazardous Substance Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/HazardousSubstance

Statement

Sub Class Of ProductCompositionStatement<sup>C</sup>

### Mf Of Dismantlable Component For Reuse Recycled Availability Statement C

IRI http://w3id.org/CEON/ontology/statement/MFOfDismantlableCo

mponent For Reuse Recycled Availability Statement

Sub Class Of <u>DismantlingStatement</u><sup>C</sup>

### Mf Of Dismantlable Component For Reuse Recycled Statement<sup>C</sup>

mponentForReuseRecycledStatement

**Sub Class Of** 

<u>DismantlingStatement</u><sup>c</sup>

 $\underline{hasMassFractionOfDismantableComponentsForReuseAndRecycle}^{op}\ value$ 

10gt-25le<sup>c</sup> or

 $\underline{hasMassFractionOfDismantableComponentsForReuseAndRecycle}^{op}\ value$ 

95gt-99le<sup>c</sup> or

 $\underline{has MassFraction Of Dismantable Components For Reuse And Recycle}^{op}\ value$ 

25qt-50le<sup>c</sup> or

 $\underline{hasMassFractionOfDismantableComponentsForReuseAndRecycle}^{op}\ value$ 

50gt-75le<sup>c</sup> or

hasMassFractionOfDismantableComponentsForReuseAndRecycle op value Ogt-

 $\underline{10 le^{c}} or \underline{hasMassFractionOfDismantableComponentsForReuseAndRecycle}^{op}$ 

value 99gt-100le c or

hasMassFractionOfDismantableComponentsForReuseAndRecycle<sup>op</sup> value

 $\underline{\tt Oge-Ole^{\tt C}} \ or \ \underline{\tt hasMassFractionOfDismantableComponentsForReuseAndRecycle}$ 

<sup>op</sup> value <u>75gt-95le</u><sup>c</sup>

### Mf Of Post Consumer Recycled Material Content Availability Statement C

IRI http://w3id.org/CEON/ontology/statement/MFOfPostConsumerRe

cycledMaterialContentAvailabilityStatement

Sub Class Of RecycledMaterialStatement<sup>C</sup>

### Mf Of Post Consumer Recycled Material Content Statement<sup>C</sup>

 ${\tt cycledMaterialContentStatement}$ 

**Sub Class Of** 

 $\underline{RecycledMaterialStatement}^{\textbf{C}}$ 

 $\underline{has MassFractionOfPostConsumerRecycledMaterialsOutOfTheTotalProductMas}$ 

s<sup>op</sup> value 25gt-50le<sup>c</sup> or

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Masser (Consu$ 

s<sup>op</sup> value <u>10gt-25le</u>c or

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Out Of The Total P$ 

s<sup>op</sup> value <u>95gt-99le</u><sup>c</sup> or

hasMassFractionOfPostConsumerRecycledMaterialsOutOfTheTotalProductMas

s<sup>op</sup> value <u>0gt-10le</u>c or

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Of PostConsumer Recycled Materials Out Of The Total Product Masser Fraction Out Of The T$ 

s<sup>op</sup> value <u>0ge-0le<sup>c</sup></u> or

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Mas}$ 

s<sup>op</sup> value <u>75gt-95le</u>c or

 $\underline{has Mass Fraction Of Post Consumer Recycled Materials Out Of The Total Product Mas}$ 

s<sup>op</sup> value <u>50gt-75le</u>c or

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Mas}$ 

s<sup>op</sup> value <u>99gt-100le</u><sup>c</sup>

### Mf Of Pre Consumer Recycled Material Content Availability Statement <sup>C</sup>

 $y cled {\tt MaterialContentAvailabilityStatement}$ 

Sub Class Of RecycledMaterialStatement<sup>C</sup>

### Mf Of Pre Consumer Recycled Material Content Statement<sup>c</sup>

ycledMaterialContentStatement

**Sub Class Of** 

RecycledMaterialStatement<sup>C</sup>

 $\underline{hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProductMass}$ 

op value <u>25gt-50le</u>c or

 $\underline{\underline{\text{hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProductMass}}$ 

op value 99gt-100le<sup>c</sup> or

hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProductMass

op value <u>0ge-0le c</u> or

hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProductMass

op value <u>75gt-95le</u>c or

 $\underline{has MassFractionOf PreConsumerRecycled MaterialsOutOf The Total Product Mass}$ 

op value <u>50gt-75le<sup>c</sup> or</u>

 $\underline{hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProductMass}$ 

<sup>op</sup> value <u>95gt-99le<sup>c</sup></u> or

 $\underline{has MassFraction Of PreConsumer Recycled Materials Out Of The Total Product Mass}$ 

<sup>op</sup> value <u>0gt-10le <sup>c</sup></u> or

 $\underline{has MassFraction Of PreConsumer Recycled Materials Out Of The Total Product Mass}$ 

op value 10gt-25le<sup>c</sup>

## Mf Of Product Designed Cleanly Removed From Fixed Assembly Availability Statement<sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/MFOfProductDesigne

dCleanlyRemovedFromFixedAssemblyAvailabilityStatement

Sub Class Of DemountingStatement<sup>C</sup>

### Mf Of Product Designed Cleanly Removed From Fixed Assembly Statement <sup>C</sup>

 ${\tt dCleanlyRemovedFromFixedAssemblyStatement}$ 

**Sub Class Of** 

<u>DemountingStatement</u><sup>C</sup>

hasMassFractionForDemounting op value 25gt-50le or hasMassFractionForDemounting value 0gt-10le or hasMassFractionForDemounting value 50gt-75le or hasMassFractionForDemounting value 0ge-0le or hasMassFractionForDemounting value 10gt-25le or hasMassFractionForDemounting value 75gt-95le or hasMassFractionForDemounting value 95gt-99le or hasMassFractionForDemounting value 95gt-99le or

hasMassFractionForDemounting op value 99gt-100le c

Mf Of Product Designed Cleanly Removed From Product Assembly Availabilitty Statement <sup>c</sup>

 ${\tt dCleanlyRemovedFromProductAssemblyAvailabilittyStatement}$ 

Sub Class Of <u>DisassemblyStatement</u><sup>C</sup>

### Mf Of Product Designed Cleanly Removed From Product Assembly Statement<sup>C</sup>

 ${\tt dCleanlyRemovedFromProductAssemblyStatement}$ 

**Sub Class Of** 

<u>DisassemblyStatement<sup>c</sup></u>

hasMassFractionForDisassembly op value 50gt-75le or hasMassFractionForDisassembly op value 0ge-0le or hasMassFractionForDisassembly op value 75gt-95le or hasMassFractionForDisassembly op value 95gt-99le or hasMassFractionForDisassembly op value 99gt-100le or hasMassFractionForDisassembly op value 25gt-50le or hasMassFractionForDisassembly op value 25gt-50le or hasMassFractionForDisassembly op value 10gt-25le or hasMassFractionForDisassembly op value 0gt-10le or hasMassFractionForDisassembly op value 0gt-10le

### Mf Of Product Recycling At Similar Level Availability Statement C

ngAtSimilarLevelAvailabilityStatement

Sub Class Of RecyclingStatement<sup>C</sup>

### Mf Of Product Recycling At Similar Level Statement<sup>c</sup>

ngAtSimilarLevelStatement

**Sub Class Of** 

RecyclingStatement<sup>C</sup>

 $\frac{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{op} \ value \ \underline{0ge-0le^c} \ or \ hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{op} \ value \ \underline{10gt-25le^c} \ or$ 

 $\frac{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{op} \ value \ \underline{25gt-50le}^{c} \ \textit{or} \ \underline{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}^{op}$ 

value <u>95gt-99le <sup>c</sup> or</u>

 $\frac{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{75le^{c}} or \frac{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{0}$ 

value Ogt-10lec or

 $\frac{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}{op} \ value \ \underline{75gt-95le}^c \ or \ \underline{hasMassFractionOfProductDesignedForRecyclingToOriginalInput}^{op}$ 

value 99gt-100lec

### Mf Of Product Released To Environment Availablity Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/MF0fProductRelease

dToEnvironmentAvailablityStatement

Sub Class Of ReleasedIntoEnvironmentStatement<sup>C</sup>

### Mf Of Product Released To Environment Statement C

IRI http://w3id.org/CEON/ontology/statement/MFOfProductRelease

dToEnvironmentStatement

**Sub Class Of** 

ReleasedIntoEnvironmentStatement<sup>c</sup>

hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 99gt-100le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 75gt-95le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 10gt-25le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 95gt-99le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 0gt-10le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 25gt-50le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 0ge-0le<sup>c</sup> or hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup> value 50gt-75le<sup>c</sup>

### Mf Of Recycled Material Content Availability Statement C

alContentAvailabilityStatement

Sub Class Of RecycledMaterialStatement<sup>C</sup>

### Mf Of Renewable Material Availability Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/MFOfRenewableMater

 $\verb|ialAvailabil| ity Statement|$ 

Sub Class Of SustainablyProducedRenewableMaterialStatement<sup>C</sup>

### Mf Of Reused Part Availability Statement<sup>C</sup>

labilityStatement

Sub Class Of ReusedContentStatement<sup>C</sup>

### Mass Fraction Of Disclosed Chemical Substance Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/MassFractionOfDisc

losedChemicalSubstanceStatement

Sub Class Of

ProductCompositionStatement <sup>C</sup>

hasMassFractionOfAllDisclosedChemicalSubstance op value 95gt-99le or hasMassFractionOfAllDisclosedChemicalSubstance op value 50gt-75le or hasMassFractionOfAllDisclosedChemicalSubstance op value 99gt-100le or hasMassFractionOfAllDisclosedChemicalSubstance op value 10gt-25le or hasMassFractionOfAllDisclosedChemicalSubstance op value 0gt-10le or hasMassFractionOfAllDisclosedChemicalSubstance op value 75gt-95le or hasMassFractionOfAllDisclosedChemicalSubstance op value 0ge-0le or hasMassFractionOfAllDisclosedChemicalSubstance op value 25gt-50le or

### Mass Fraction Of Recycled Material Statement<sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/MassFractionOfRecy

cledMaterialStatement

**Sub Class Of** 

RecycledMaterialStatement<sup>c</sup>

 $\frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{100le^{c}} or \frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{100le^{c}} or \frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{100le^$ 

value <u>Oge-Ole</u><sup>c</sup> or

 $\frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{50le^{c}} or \frac{25gt-50le^{c}}{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{op}$ 

value <u>0gt-10le<sup>c</sup></u> or

 $\frac{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{op} \ value \ \frac{75gt-95le}{or} \frac{o}{hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass}{op}$ 

value 10gt-25lec or

<u>hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass</u><sup>op</sup> <u>value</u> <u>95gt-99le</u> or <u>hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass</u> op

value 50gt-75le<sup>C</sup>

### Mass Fraction Of Renewable Material Statement<sup>C</sup>

wableMaterialStatement

**Sub Class Of** 

<u>SustainablyProducedRenewableMaterialStatement</u><sup>C</sup>

 $\frac{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{0ge-0le^{\tt C}\ or\ hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{op\ value\ 0gt-10le^{\tt C}\ or\ }$ 

 $\frac{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{95gt-99le}^{c}\ or$ 

 $\frac{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{75gt-95le}^{c} \ or$ 

hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass<sup>op</sup> value

<u>50gt-75le<sup>c</sup> or</u>

 $\frac{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}{99gt-100le} or$ 

 $\underline{\text{hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass}}^{op}\, \textbf{value}\\ \underline{25\text{gt-}50\text{le}^{\text{c}}}$ 

Mass Fraction Of Reused Part Statement C

IRI http://w3id.org/CEON/ontology/statement/MassFractionOfReus

edPartStatement

**Sub Class Of** 

ReusedContentStatement<sup>C</sup>

hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 10gt-25le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 0ge-0le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 50gt-75le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 0gt-10le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 25gt-50le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 75gt-95le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 95gt-99le<sup>c</sup> or hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup> value 99gt-100le<sup>c</sup>

### Pc Availability Statement <sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/PCAvailabilityStat

ement

**Sub Class Of** ProductCompositionStatement<sup>C</sup>

### Pcds Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/PCDSStatement

**Sub Class Of** Statement<sup>C</sup>

**Super Class Of** 

<u>DemountingStatement<sup>C</sup></u> <u>DisassemblyStatement</u><sup>C</sup> <u>DismantlingStatement</u><sup>c</sup> <u>ProductCompositionStatement<sup>C</sup></u>

RecycledMaterialStatement<sup>C</sup> RecyclingStatement<sup>C</sup>

ReleasedIntoEnvironmentStatement<sup>C</sup> RenewableEnergyStatement<sup>C</sup> ReusedContentStatement<sup>C</sup>

<u>SustainablyProducedRenewableMaterialStatement</u><sup>C</sup>

WaterReuseOrRecirculationStatement<sup>C</sup>

### Post Consumer Recycled Material Composition Availability Statement <sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/PostConsumerRecycl

edMaterialCompositionAvailabilityStatement

**Sub Class Of** RecycledMaterialStatement<sup>C</sup>

### Post Consumer Recycled Material Composition Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/PostConsumerRecycl

edMaterialCompositionStatement

**Sub Class Of** RecycledMaterialStatement<sup>C</sup>

Restriction  $\underline{hasPostConsumerRecycledMaterialCompositionThreshold}^{op}\ value$ 

PostConsumerRecycledMaterialCompositionStatement<sup>C</sup>

### Pre Consumer Recycled Material Composition Availability Statement C

http://w3id.org/CEON/ontology/statement/PreConsumerRecycle IRI

dMaterial Composition Availability Statement

**Sub Class Of** RecycledMaterialStatement<sup>C</sup> Pre Consumer Recycled Material Composition Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/PreConsumerRecycle

dMaterialCompositionStatement

Sub Class Of RecycledMaterialStatement<sup>C</sup>

Restriction <u>hasPreConsumerRecycledMaterialCompositionThreshold</u> value

<u>PreConsumerRecycledMaterialCompositionStatement</u><sup>C</sup>

Product Composition Certification Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/ProductComposition

CertificationStatement

Sub Class Of ProductCompositionStatement<sup>C</sup>

Product Composition Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/ProductComposition

Statement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of

hasChemicalSubstanceThresholdUsedByManufacturer<sup>op</sup> hasMassFractionOfAllDisclosedChemicalSubstance<sup>op</sup>

**Super Class Of** 

<u>DisclosedChemicalSubtanceStatement</u><sup>C</sup>

<u>HazardousSubstanceDeclarationAvailabilitiyStatement</u><sup>C</sup>

HazardousSubstanceStatement<sup>c</sup>

 $\underline{\mathsf{MassFractionOfDisclosedChemicalSubstanceStatement}^{\textbf{C}}}$ 

PCAvailabilityStatement <sup>C</sup>

 $\frac{Product Composition Certification Statement^{C}}{Product Composition Validation Statement^{C}}$ 

Product Composition Validation Statement <sup>C</sup>

ValidationStatement

Sub Class Of ProductCompositionStatement<sup>C</sup>

Recycled Material Statement<sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/RecycledMaterialSt

atement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of

 $\underline{has MassFraction Of PostConsumer Recycled Materials Out Of The Total Product Mas}$ 

sop

 $\underline{has MassFraction Of PreConsumer Recycled Materials Out Of The Total Product Mass}$ 

op

 $\frac{hasMassFractionOfRecycledMaterialSOutOfTheTotalProductMass}{hasPostConsumerRecycledMaterialCompositionThreshold}{}^{op}\\ \frac{hasPreConsumerRecycledMaterialCompositionThreshold}{}^{op}$ 

**Super Class Of** 

 $\underline{\mathsf{MFOfPostConsumerRecycledMaterialContentAvailabilityStatement}^{\mathtt{C}}$ 

MFOfPostConsumerRecycledMaterialContentStatement<sup>C</sup>

MFOfPreConsumerRecycledMaterialContentAvailabilityStatement<sup>C</sup>

 $\frac{MFOfPreConsumerRecycledMaterialContentStatement^{\complement}}{MFOfRecycledMaterialContentAvailabilityStatement^{\complement}}\\ \frac{MassFractionOfRecycledMaterialStatement^{\complement}}{MassFractionOfRecycledMaterialStatement^{\complement}}$ 

PostConsumerRecycledMaterialCompositionAvailabilityStatement<sup>C</sup>

PostConsumerRecycledMaterialCompositionStatement<sup>C</sup>

PreConsumerRecycledMaterialCompositionAvailabilityStatement<sup>C</sup>

PreConsumerRecycledMaterialCompositionStatement<sup>C</sup>

### Recycling Statement<sup>C</sup>

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of hasMassFractionOfProductDesignedForRecyclingToOriginalInput<sup>op</sup>

**Super Class Of** 

MFOfProductRecyclingAtSimilarLevelAvailabilityStatement<sup>C</sup>

MFOfProductRecyclingAtSimilarLevelStatement<sup>C</sup>

### Released Into Environment Statement<sup>C</sup>

nmentStatement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of hasMassFractionOfProductReleasedIntoEnvironment<sup>op</sup>

**Super Class Of** 

MFOfProductReleasedToEnvironmentAvailablityStatement<sup>C</sup>

MFOfProductReleasedToEnvironmentStatement <sup>C</sup>

Renewable Energy Statement<sup>C</sup>

IRI http://w3id.org/CEON/ontology/statement/RenewableEnergySta

tement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of <a href="https://hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix">hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix</a> op

**Super Class Of** 

<u>FractionOfRenewableEnergyAvailabilityStatement</u><sup>C</sup>

<u>FractionOfRenewableEnergyStatement</u><sup>c</sup>

Reused Content Statement<sup>C</sup>

ment

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup>

Super Class Of MFOfReusedPartAvailabilityStatement<sup>C</sup>

<u>MassFractionOfReusedPartStatement</u><sup>C</sup>

Statement<sup>C</sup>

Sub Class Of Entity<sup>C</sup>

**In Domain Of** 

statement/About op statement/Value dp

Super Class Of PCDSStatement<sup>C</sup>

Sustainably Produced Renewable Material Statement<sup>C</sup>

dRenewableMaterialStatement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass<sup>op</sup>

**Super Class Of** 

MFOfRenewableMaterialAvailabilityStatement<sup>C</sup>
MassFractionOfRenewableMaterialStatement<sup>C</sup>

Vf Of Reduction Direct Water Availability Statement C

tWaterAvailabilityStatement

Sub Class Of WaterReuseOrRecirculationStatement<sup>C</sup>

### Vf Of Reduction Direct Water Statement c

tWaterStatement

**Sub Class Of** 

WaterReuseOrRecirculationStatement<sup>c</sup>

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value <u>0gt-10le<sup>c</sup> or</u>

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value 75gt-95le c or

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value 99gt-100le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value 95gt-99le c or

 $has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production \\ ^{op}$ 

value 10gt-25le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value 25gt-50le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

value <u>50gt-75le <sup>c</sup> or</u>

hasVolumeFractionOfReductionOfDirectWaterConsumptionUsedInProduction<sup>op</sup>

value <u>Oge-Ole</u> <sup>C</sup>

### Vf Of Reused Recirculated Water Availability Statement C

IRI http://w3id.org/CEON/ontology/statement/VFOfReusedRecircul

atedWaterAvailabilityStatement

Sub Class Of WaterReuseOrRecirculationStatement<sup>C</sup>

### Vf Of Reused Recirculated Water Statement C

atedWaterStatement

**Sub Class Of** 

<u>WaterReuseOrRecirculationStatement</u><sup>c</sup>

hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProduction<sup>op</sup> value

75gt-95le<sup>c</sup> or

hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProductionop value

Oge-Ole<sup>c</sup> or

 $\underline{\text{hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProduction}}^{\text{op}} \text{ value}$ 

25gt-50le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reused Or Recirculated Water Used In Production}^{op} \ \textbf{value}$ 

99gt-100le<sup>c</sup> or

 $\underline{hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProduction}^{op}\ value$ 

Ogt-10le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reused Or Recirculated Water Used In Production}^{op} \ value$ 

10gt-25le<sup>c</sup> or

 $\underline{has Volume Fraction Of Reused Or Recirculated Water Used In Production}^{op} \ value$ 

95qt-99le<sup>c</sup> or

<u>hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProduction</u> op value

<u>50gt-75le</u><sup>C</sup>

Validation <sup>c</sup>

IRI http://w3id.org/CEON/ontology/statement/Validation

In Range Of has Validation op

**Named Individuals** 

certified<sup>ni</sup>

validatedByThirdParty<sup>ni</sup>

Water Reuse Or Recirculation Statement<sup>c</sup>

ulationStatement

Sub Class Of PCDSStatement<sup>C</sup>

In Domain Of

 $\underline{has Volume Fraction Of Reduction Of Direct Water Consumption Used In Production}^{op}$ 

 $\underline{has Volume Fraction Of Reused Or Recirculated Water Used In Production}^{op}$ 

**Super Class Of** 

VFOfReductionDirectWaterAvailabilityStatement<sup>C</sup>

VFOfReductionDirectWaterStatement<sup>C</sup>

<u>VFOfReusedRecirculatedWaterAvailabilityStatement</u><sup>C</sup>

VFOfReusedRecirculatedWaterStatement<sup>C</sup>

Entity <sup>C</sup>

IRI http://www.w3.org/ns/prov#Entity

Super Class Of resourceODP:Resource

<u>Statement<sup>C</sup></u>

Role C

Super Class Of <a href="http://w3id.org/CEON/ontology/actorODP/Role">http://w3id.org/CEON/ontology/actorODP/Role</a>

### **Object Properties**

has availability op

Range <u>Availability</u><sup>C</sup>

has chemical substance threshold used by manufacturer op

IRI http://w3id.org/CEON/ontology/statement/hasChemicalSubstan

ceThresholdUsedByManufacturer

Sub Property Of <a href="hasQuantityInterval">hasQuantityInterval</a> op

**Domain** ProductCompositionStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has fraction of renewable energy out of the total production energy mix op

able Energy Out Of The Total Production Energy Mix

Sub Property Of hasQuantityInterval op

Domain RenewableEnergyStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction for demounting op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionFor

Demounting

Sub Property Of hasQuantityInterval op

DemountingStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction for disassembly op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionFor

Disassembly

Sub Property Of hasQuantityInterval op

DisassemblyStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of all disclosed chemical substance op

llDisclosedChemicalSubstance

Sub Property Of hasQuantityInterval op

**Domain** ProductCompositionStatement<sup>C</sup>

has mass fraction of dismantable components for reuse and recycle op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionOfD

ismantableComponentsForReuseAndRecycle

Sub Property Of <u>hasQuantityInterval</u>op

Domain DismantlingStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of post consumer recycled materials out of the total product mass

ор

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionOfP

ost Consumer Recycled Materials Out Of The Total Product Mass

Sub Property Of hasQuantityInterval op

Domain RecycledMaterialStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of pre consumer recycled materials out of the total product mass op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionOfP

reConsumerRecycledMaterialsOutOfTheTotalProductMass

Sub Property Of hasQuantityInterval op

Domain RecycledMaterialStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of product designed for recycling to original input op

roductDesignedForRecyclingToOriginalInput

Sub Property Of hasQuantityInterval op

Domain RecyclingStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of product released into environment op

roductReleasedIntoEnvironment

Sub Property Of hasQuantityInterval op

**Domain** ReleasedIntoEnvironmentStatement<sup>C</sup>

has mass fraction of recycled materials out of the total product mass op

ecycledMaterialsOutOfTheTotalProductMass

Sub Property Of <a href="hasQuantityInterval">hasQuantityInterval</a> op

**Domain** RecycledMaterialStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of renewable materials out of the total product mass op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionOfR

enewableMaterialsOutOfTheTotalProductMass

Sub Property Of hasQuantityInterval op

Domain SustainablyProducedRenewableMaterialStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has mass fraction of reused parts out of the total product op

IRI http://w3id.org/CEON/ontology/statement/hasMassFractionOfR

eusedPartsOutOfTheTotalProduct

Sub Property Of hasQuantityInterval op

Domain ReusedContentStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has post consumer recycled material composition threshold op

IRI http://w3id.org/CEON/ontology/statement/hasPostConsumerRec

ycledMaterialCompositionThreshold

Sub Property Of <u>hasQuantityInterval</u>op

**Domain** RecycledMaterialStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has pre consumer recycled material composition threshold op

cledMaterialCompositionThreshold

Sub Property Of hasQuantityInterval op

Domain RecycledMaterialStatement<sup>C</sup>

### has quantity interval op

IRI

http://w3id.org/CEON/ontology/statement/hasQuantityInterva

### **Super Property Of**

- hasChemicalSubstanceThresholdUsedByManufacturer<sup>op</sup>
- hasFractionOfRenewableEnergyOutOfTheTotalProductionEnergyMix<sup>op</sup>
- <u>hasMassFractionForDemounting</u> op
- hasMassFractionForDisassembly op
- hasMassFractionOfAllDisclosedChemicalSubstance op
- hasMassFractionOfDismantableComponentsForReuseAndRecycle<sup>op</sup>
- <u>hasMassFractionOfPostConsumerRecycledMaterialsOutOfTheTotalProductMass</u>
- hasMassFractionOfPreConsumerRecycledMaterialsOutOfTheTotalProduc tMass<sup>op</sup>
- <u>hasMassFractionOfProductDesignedForRecyclingToOriginalInput</u>op
- <u>hasMassFractionOfProductReleasedIntoEnvironment</u><sup>op</sup>
- hasMassFractionOfRecycledMaterialsOutOfTheTotalProductMass<sup>op</sup>
- <u>hasMassFractionOfRenewableMaterialsOutOfTheTotalProductMass</u><sup>op</sup>
- hasMassFractionOfReusedPartsOutOfTheTotalProduct<sup>op</sup>
- hasPostConsumerRecycledMaterialCompositionThreshold op
- hasPreConsumerRecycledMaterialCompositionThreshold op
- hasVolumeFractionOfReductionOfDirectWaterConsumptionUsedInProduct ion<sup>op</sup>
- <u>hasVolumeFractionOfReusedOrRecirculatedWaterUsedInProduction</u><sup>op</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

### has validation op

IRI http://w3id.org/CEON/ontology/statement/hasValidation

Range Validation<sup>C</sup>

has volume fraction of reduction of direct water consumption used in production op

fReductionOfDirectWaterConsumptionUsedInProduction

Sub Property Of hasQuantityInterval op

Domain WaterReuseOrRecirculationStatement<sup>C</sup>

Range <a href="http://w3id.org/CEON/ontology/quantity#QuantityInterval">http://w3id.org/CEON/ontology/quantity#QuantityInterval</a>

has volume fraction of reused or recirculated water used in production op

 $fReused 0 \\ rRecirculated \\ Water \\ Used In Production$ 

Sub Property Of hasQuantityInterval op

Domain WaterReuseOrRecirculationStatement<sup>C</sup>

statement about op

IRI http://w3id.org/CEON/ontology/statement/statementAbout

Domain Statement<sup>C</sup>

### **Datatype Properties**

available end date dp

Range xsd:date

available start date dp

Range xsd:date

is pcds statement true dp

IRI http://w3id.org/CEON/ontology/statement/isPCDSStatementTru

e

Range <u>xsd:boolean</u>

statement value dp

IRI http://w3id.org/CEON/ontology/statement/statementValue

Domain Statement<sup>C</sup>

### **Annotation Properties**

has unit<sup>ap</sup>

IRI http://qudt.org/schema/qudt/hasUnit

numeric value ap

IRI http://qudt.org/schema/qudt/numericValue

has maximal value included of interval ap

IRI http://w3id.org/CEON/ontology/quantity#hasMaximalValueIncl

udedOfInterval

# has minimal value included of interval ap IRI http://w3id.org/CEON/ontology/quantity#hasMinimalValueIncl udedOfInterval has minimal value not included of interval ap IRI http://w3id.org/CEON/ontology/quantity#hasMinimalValueNotI ncludedOfInterval Pcd Smapping ap IRI http://w3id.org/CEON/ontology/statement/PCDSmapping

### **Namespaces**

```
http://w3id.org/CEON/ontology/statement/
dcterms
    http://purl.org/dc/terms/
owl
    http://www.w3.org/2002/07/owl#
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/
xsd
    http://www.w3.org/2001/XMLSchema#
```

### Legend

С	Classes
ор	Object Properties
dp	Datatype Properties
ар	Annotation Properties