#### Impact Categories

16 environmental impact categories describe how humans harm the planet through production and construction.



Climate change



Land use

lonising radiation

Eutrophication

freshwater



Particulate matter

**Resource use** 

minerals and metals

Photochemical

ozone formation

Human toxicity,

cancer



Water use

Ozone depletion

Eutrophication

terrestrial

Ecotoxicity

freshwater



Resource use fossils



Acidification



Eutrophication, marine



Human toxicity, noncancer

1	2587.449781	kg CO <sub>2</sub> eq
2	0.000 <b>321</b>	Disease incidence
3	1829.474203	M <sup>3</sup> world eq
4	<u>65561.667349</u>	MJ
5	573.633041	Dimensionless
6	0.0 <b>14854</b>	kg Sb eq
7	0.0000 <b>21</b>	kg CFC-11 eq
8	18.124273	Mol H+eq
9	34.671085	<u>Kbq U-235 eq</u>
10	13.124030	kg NMVOC eq
11	45.446968	Mol N eq
12	4.756349	kg N eq
13	0.173241	kg P eq
14	0.00000 <b>2</b>	CTUh
15	45037.101032	CTUe
16	0.0000 <b>20</b>	CTUh



\* Scientists have weighted the categories based on urgency, impact scale, accuracy of measuring method. Numbers are based on calculations of 1 tonne of Polypropylene (PP) pellets GLO. Numbers are subject to changes.

### THE JOURNEY FROM 16 IMPACT CATEGORIES TO ONE SINGLE SCORE

#### Normalization

The impact categories are measured in different units. To be able to compare them to each other, results from each category are converted into a common reference unit. This process is called normalization. The common reference unit in PEF LCA is the environmental impacts of an average global person over one year.

# PEF single score = 0.311692

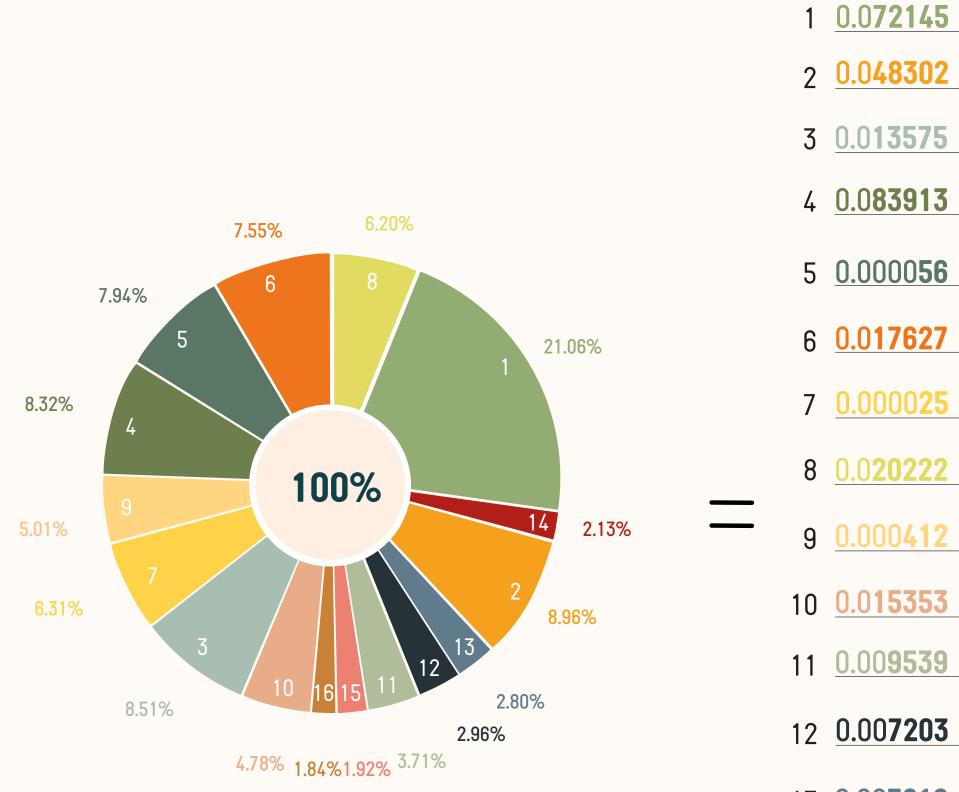
The single score reflects the overall environmental performance of a product. The single score is obtained by adding up all the weighted results.

### Weighting

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Not all impact categories are considered equally important. To get the weighted results, the normalized results are multiplied by their weighting factor\*.

Now, the product's impact on the environmental categories is comparable.



I	0.072140
2	<u>0.0<b>48302</b></u>
3	<u>0.0<b>13575</b></u>
4	<u>0.0<b>83913</b></u>
5	<u>0.0000<b>56</b></u>
6	<u>0.0<b>17627</b></u>
7	<u>0.0000<b>25</b></u>
8	<u>0.0<b>20222</b></u>
9	<u>0.000<b>412</b></u>
10	<u>0.0<b>15353</b></u>
11	<u>0.00<b>9539</b></u>
12	0.00 <b>7203</b>
13	<u>0.00<b>3019</b></u>
14	<u>0.00<b>2139</b></u>
15	<u>0.0<b>15246</b></u>
16	<u>0.00<b>2916</b></u>
	0.711000 DEE :

0.311692 PEF single score

## MÅLBAR

