



SUPREME



EPMA

European powder metallurgy association

EPMA Sustainability Survey for the SUPREME Project Survey in the PM community on importance of environmental impact indicators

This survey is run within the [SUPREME](#) project.

The aim is to assess the awareness of the Powder Metallurgy community about sustainability issues, in particular about the opinions on the importance of the various environmental impact indicators (16 different ones) for the PM industry. As different sectors and activities may have a different view, some of the questions are used to discriminate the origin of the opinions, that will be strictly anonymous.

The key question is the last one, where we ask you to assess the importance of the 16 indicators according to you and your experience and knowledge (not necessarily from a "sustainability expert!"). In order to help you with the definitions of the indicators, we have prepared a "survey guide" where they are described, please check it [here](#) in case of need.

For any further explanation, refer to Bruno Vicenzi (bv@epma.com).

* 1. Are you from:

- A Powder Metallurgy related company
- A Powder Metallurgy related research group
- Other (please specify)

2. Is your company/research group (or you individually) EPMA member?

- Yes
- No
- Not sure

3. Where are you located

- Europe
- Outside Europe

* 4. What field(s) of powder metallurgy are you/is your company/research group involved in? (multiple choices possible)

- Powder production, any material or method
- PIM feedstock manufacturing
- Parts production with Press&Sinter of metal powders
- Parts production with Hard Materials (incl. ceramics)
- Parts production by Powder Injection Moulding
- Parts production by Metal and Ceramic Additive Manufacturing
- Parts production by Hot Isostatic Pressing
- Parts production with Functional Materials
- Equipment manufacturing (for PM production, testing, etc)
- Testing and services, incl. consultants
- Additives for PM (incl. binders, lubricants, grinding media, etc., excluding metal or ceramic powders)
- Other (please specify)

*** 5. Which is the sector where you carry on your job (only one choice, main sector in case)?**

- Research
- Production
- Quality
- Management
- Other (please specify)

*** 6. Are you specifically involved in environmental issues in your job? (Meaning: are you specifically experienced on the subject?)**

- Yes
- Yes, in a previous job/position
- No

*** 7. Rate the importance of the following 16 environmental impact indicators: (assign importance with figures from 1 to 4, 1=most important to 4=least important. For explanations on indicators, read the survey guide)**

	1	2	3	4
Climate change (kg CO2 eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ozone depletion (kg CFC-11 eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-cancer human health effects (CTUh)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cancer human health effects(CTUh)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Particulate Matter - Respiratory inorganics (disease inc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4
Ionizing radiation HH (kBq U235 eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Photochemical ozone formation (kg NMVOC eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acidification terrestrial and freshwater (molc H+ eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eutrophication terrestrial (molc N eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eutrophication freshwater (kg P eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eutrophication marine (kg N eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ecotoxicity freshwater (CTUe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Land use (Pt)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water scarcity (m3 depriv)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resource use, energy carriers (MJ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resource use, mineral and metals (kg Sb eq)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>