

e3s Economic, Environmental and Social Impacts of the Energy Transition



AMPEA-E3S Joint Workshop

Economic, environmental and social impact of material research

toward clean energy transition

Feb 24, 2022 (online)

| Time | Торіс | Presenter | Organization |
|-------|---|---------------|--------------|
| 13:00 | Welcome | Organization | |
| | | chairs | |
| 13:05 | JP-AMPEA introduction | JPC AMPEA | |
| 13:15 | JP-E3S introduction | JPC E3S | |
| | Session 1 (chair: to be defined) | · | |
| 13:25 | Supply risk analysis of silver for solar thermal power plants. An analysis of global value chain | A.R. Gamara | CIEMAT, ES |
| 13:40 | Implementing sustainability in laboratory activities: A case study on magnetron sputtering deposition synthesis based on Life Cycle Assessment approach | S. Fiameni | CNR, IT |
| 13:55 | Challenges in the recycling of printed circuit boards in WEEEs | JC. Gabriel | CEA, FR |
| 14:10 | Outlooks and current limitations of tools for sustainability-driven decision-making in manufacturing | M. Mele | UniBO |
| 14:25 | Coffee/tea break | | |
| | Session 2 (chair: TBD) | | |
| 14:35 | Materials and sustainable nuclear energy | L. Malerba | CIEMAT, ES |
| 14:50 | Net Energy Balance Assessment of a Coupled Photoelectrochemical H2 Production and Hydrogenation Device | X. Zhang | HZB- GE |
| 15:05 | Consumers' preferences for nanocarbon heating & cooling devices | M. Thiene | UniPD, IT |
| 15:20 | Citizens, Society and a Future technology for solar fuels and chemicals: Challenges and Potentials | H. Ottossen | U.Upp, SE |
| 15:35 | Environmental Product Optimisation by Design | R. Veenstra | U.Gron, NL |
| 15:50 | Break | | |
| | Session 3 (chair: TBD) | · | |
| 16:05 | Development and socio-technical-economic environmental assessment of innovative materials for exploiting renewable energy sources | E. Annunziata | SSSA, IT |
| 16:20 | Raw materials for the energy transition: circular approach and sustainability | L. Cutaia | ENEA, IT |
| 16:35 | H2020 project openENTRANCE (transition scenario to a low carbon future) | Ing. Graabak | SINTEF, NO |
| 16:50 | <i>Environmental assessment of metal hydride technology</i> <i>for hydrogen storage and compression.</i> | M. Costamagna | UniTo, IT |
| 17:05 | Wrap-up discussion session | | |
| 17:25 | Closing remarks | | |

17:30: end of workshop