



# 2021 Clean Space Industrial Days

## Tuesday, 21 September 2021

### Ecodesign for space: Ecodesign at ESA (09:30 - 11:00)

time	[id] title	presenter
09:30	[123] Introduction	MORALES SERRANO, Sara
09:50	[124] Ecodesign : where does ESA stand?	PADILLA, Estefanía PROUTEAU, Romane MORALES SERRANO, Sara

### Ecodesign for space: Non financial reporting (11:30 - 12:10)

time	[id] title	presenter
11:30	[96] Impacts of Directive 2014/95/EU on Environmental Impact Reporting by European Space Transportation Industry	CHANOINE, Augustin Mr BLANCHET, Sylvain Mrs TSCHORA, Héloïse

### Ecodesign for space: LCA of Ground Segments (14:00 - 15:00)

time	[id] title	presenter
14:00	[54] Life Cycle Assessment of Ground Segment in space sector	DE SANTIS, MICHELE
14:30	[95] LCA of ground stations	COLIN, Flavien CHANOINE, Augustin WONNEBERGER, Natacha

### Ecodesign for space: Environmental impacts of spacecraft demise (15:00 - 15:50)

time	[id] title	presenter
15:00	[125] Atmospheric Re-entry Assessment (ARA)	Mr BIANCHI , Simone
15:20	[150] Environmental impacts of atmospheric emissions from spacecraft re-entry demise	Dr BEKKI, Slimane
15:40	[145] Q&As	

### Ecodesign for space: ESA Life-Cycle Assessment Database (16:00 - 17:00)

time	[id] title	presenter
16:00	[126] Introduction to the ESA LCA Database	CLEAN SPACE TEAM
16:10	[115] ESA LCA Database - a guided tour	Prof. PETERSEN, Johan Berg
16:40	[84] ESA LCA database	GROZEA, Ionut DE SANTIS, MICHELE WILSON, Andrew

# Wednesday, 22 September 2021

## Ecodesign for space: LCA & Ecodesign in ESA projects (09:30 - 11:00)

time	[id] title	presenter
09:30	[134] LCA & Ecodesign in ESA projects	

## Ecodesign for space: LCA implemented in projects (11:30 - 12:30)

time	[id] title	presenter
11:30	[86] LCA and eco-design of a launch service based on a reusable launcher	PINEAU, Léonard
12:00	[165] Status and opportunities for sustainability and circular economy for clean space industry	MENDOZA, Jamila

## Ecodesign for space: ESA LCA Handbook (14:00 - 15:00)

time	[id] title	presenter
14:00	[139] LCA handbook	CLEANSPEACE TEAM
14:10	[94] Update of ESA LCA guidelines	CHANOINE, Augustin COLIN, Flavien Mrs WONNEBERGER, Natacha
14:30	[146] Discussion	

# Thursday, 23 September 2021

## Ecodesign for space: Green technologies (09:30 - 11:00)

time	[id] title	presenter
09:30	[64] Umicore's strategy to increase Germanium resource efficiency for future low-carbon space multijunction solar cell technology	KURSTJENS, Rufi
10:00	[61] Effective Use of Germanium	Prof. DOLD, Peter
10:30	[72] Life Cycle Assessment of Green Electronics for Space	CAUWE, Maarten

## Ecodesign for space: Green technologies (11:30 - 12:30)

time	[id] title	presenter
11:30	[63] Environmentally friendly polyurethane materials for space applications	VLCEK, Tomas
11:50	[111] Life cycle of propellants: environmental benchmark of current "green" propellants	Mr SCHABEDOTH, Paul
12:10	[118] LCA of alternative materials for optical payload	BOUILLY, Ariane MAZOLLIER, Nicolas