



Ulla Grönlund, PhD

Civil, Environmental & Natural Resources Engineering

Luleå University of Technology



Sustainability





GLOBAL CHALLENGES

- **Energy/Raw materials**
- **Environment**
- **Food & Water**
- **Health**
- **Pandemics**
- **Demography**
- **Security**

**Challenge driven research, education, innovation
&
Collaboration**



Sustainability & Economy

