

# Research Needs

## Green ECS:

### Energy efficiency and life-cycle enhancements of ECS

#### Specific Objectives:

- Focus on low power, low environmental footprint technologies (manufacturing and full life cycle)
- Integrate environmental impact in all the design precess
- Systemic approach for environmental issues related to technology.
- Address scale-up effect of technology/ ECS systems regarding environmental impacts.

#### Main Research Needs:

- Work on a holistic framework (5R +1 - Recycle, Reuse, Repair, Robust, Reliable + Responsible design)
- Assess and report on use impacts.
- Standardize environmental impact for ships, boards, systems.
- Integrate rapidly environmental aspects in electronic product to cope with customer expectation and regulation changes.

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