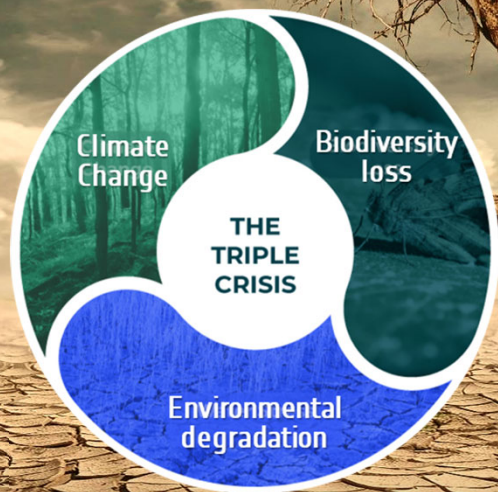


EOP Ecodesign Strategy

Miguel Such Taboada (EOP-P5S)
Clean Space Office team (OPS-SY)
01/07/2026

A Triple Planetary Crisis

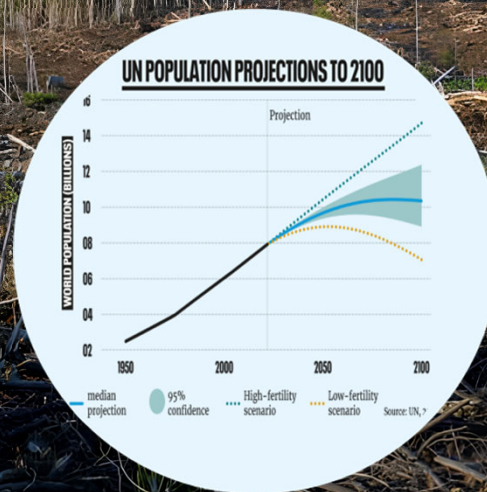
Climate Change, Biodiversity loss, Environmental degradation



“6.37 million hectares of forest lost globally in 2023”



Population, socio-economic and environmental pressures



“9 Billion people to feed by 2035”



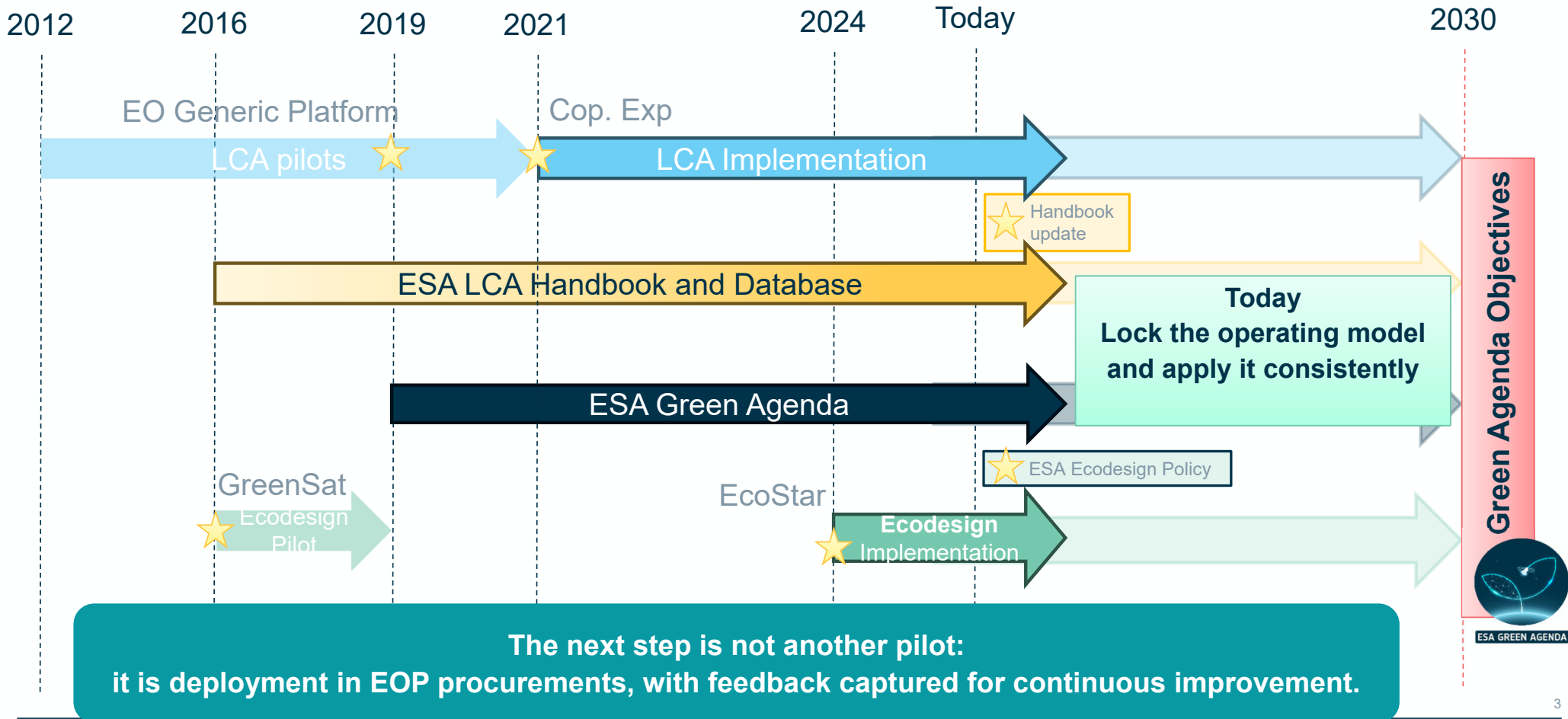
Severe consequences for weather, economy & security

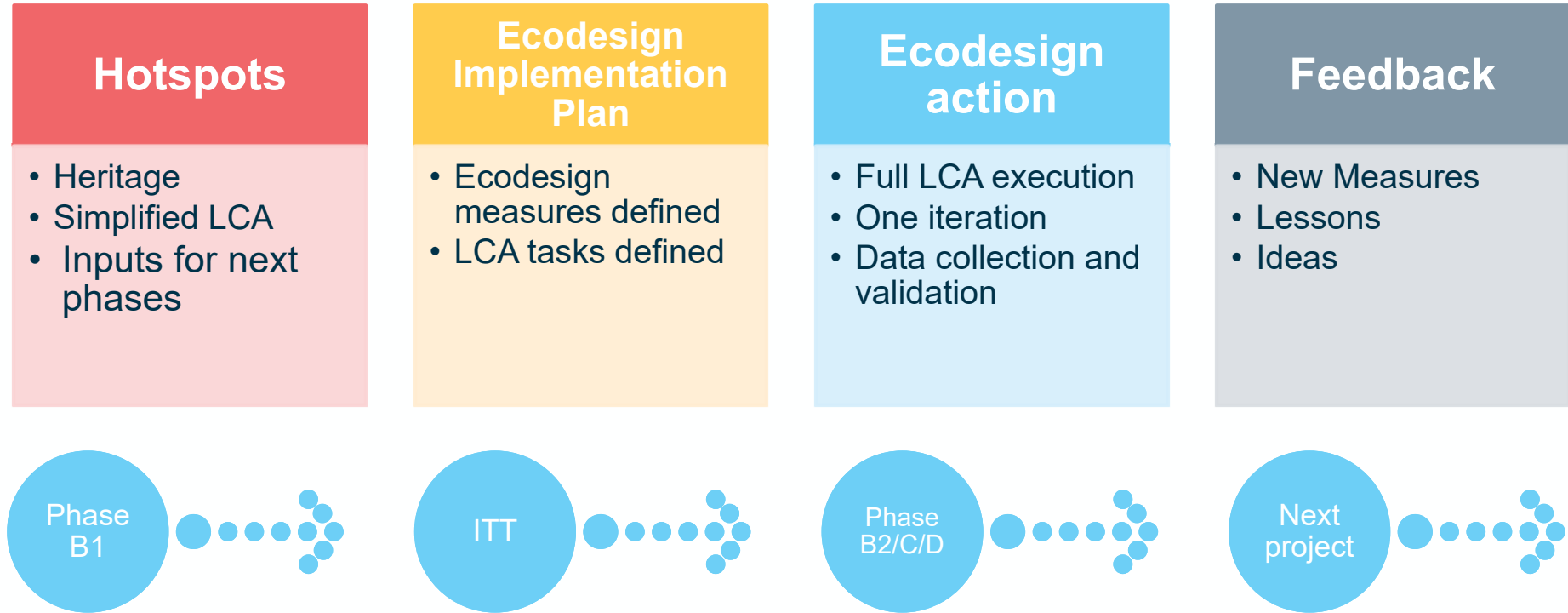


“Top 4 most severe global risks by WEF”

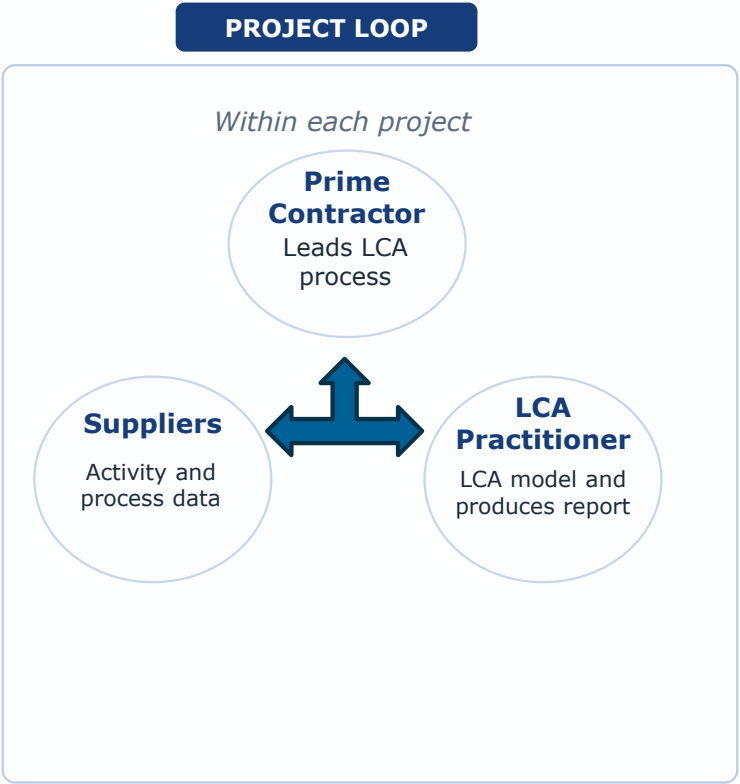


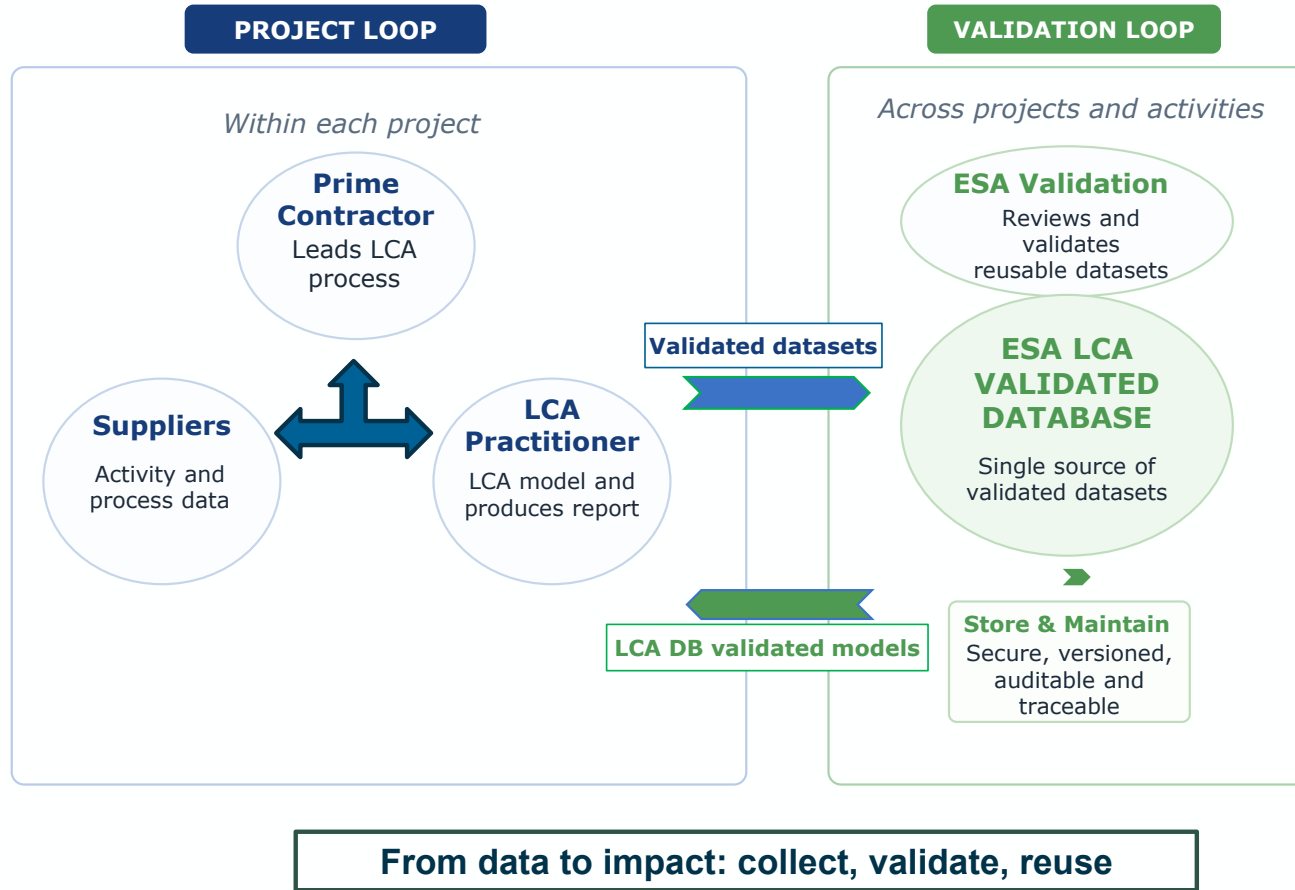
Roadmap to 2030: from pilots to operational Ecodesign

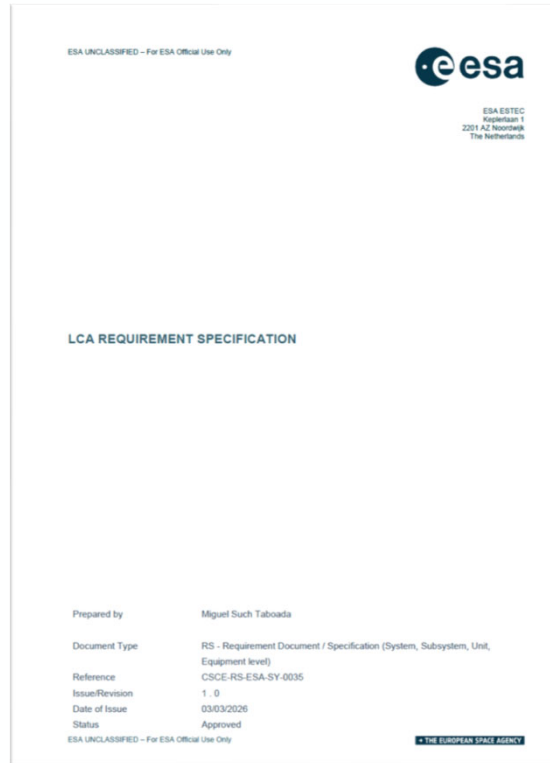




EOP Ecodesign: Driving environmental improvement across missions.







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- Supplier questionnaires
- Heritage + ESA datasets
- Support ESA Data validation

- Build system-level model
- Use validated ESA DB / new / reused datasets
- Ensure traceability

- Quantify environmental impacts of Ecodesign measures
- Identify **hotspots**
- Perform sensitivity analysis

- Implement required design and verification measures
- Identify future improvement actions for next missions

- LCA model + report
- Contribute to ESA database
- Capture lessons learned for next missions

- Functional unit: **space segment fulfilling mission requirements**
- System boundaries aligned with **SoW**
- Ensure **completeness**

- Midpoint impact categories
- PEFCR Single Score using PEF methodology
- Focus on **key indicators** (GWP, ADEPL, HTOX)

- Collect data at **all levels**
- Use **standard questionnaire (AD1)**
- Allow estimates when needed, but **justify, document, and assess completeness.**

- **Compatibility with ESA LCA DB**
- Transparent modelling
- **Model format defined**

- LCA report including **quantified ecodesign assessment**
- Provide **Data Quality Rating (DQR)** for key indicators
- Ensure **full traceability and auditability**

- 1 EOP Ecodesign: Driving environmental improvement across missions.
- 2 From data to impact: collect, validate, reuse
- 3 One harmonised LCA framework for all EOP missions.

Ecodesign becomes impactful when it is integrated into decisions, not just reporting.

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