



SUSTAIN-6G

SUSTainability Advanced and Innovative Networking with 6G

The European Lighthouse project

Facts & Figures

Call

- [EU HORIZON-JU-SNS-2024-STREAM-B-01-07 Sustainability Lighthouse](https://sustain-6g.eu)

Project Management

- *Coordinator: Christoph Schmelz, Nokia, Munich*
- Technical Manager: Olivier Bouchet, Orange, FR
- Innovation Manager: Anastasius Gavras, Eurescom, DE

Timeline

- Project start: 1.1.2025
- Project runtime: 2.5 years (– 30.6.2027)

Consortium

- 24 partners (7 Telco, 4 Industry, 5 academia, 8 SME)

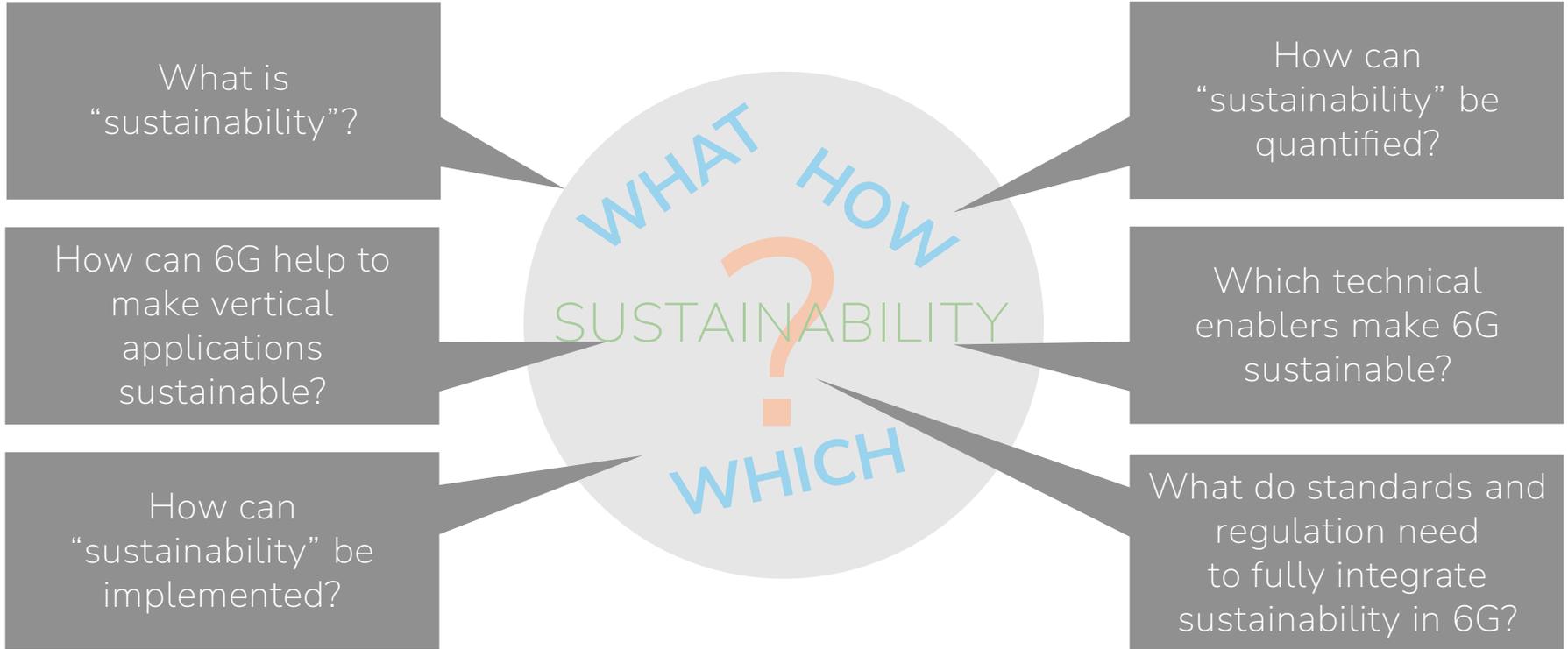
Budget & Effort

- Total funding: 13 M€
- Total effort: ~40 full-time contributors over runtime



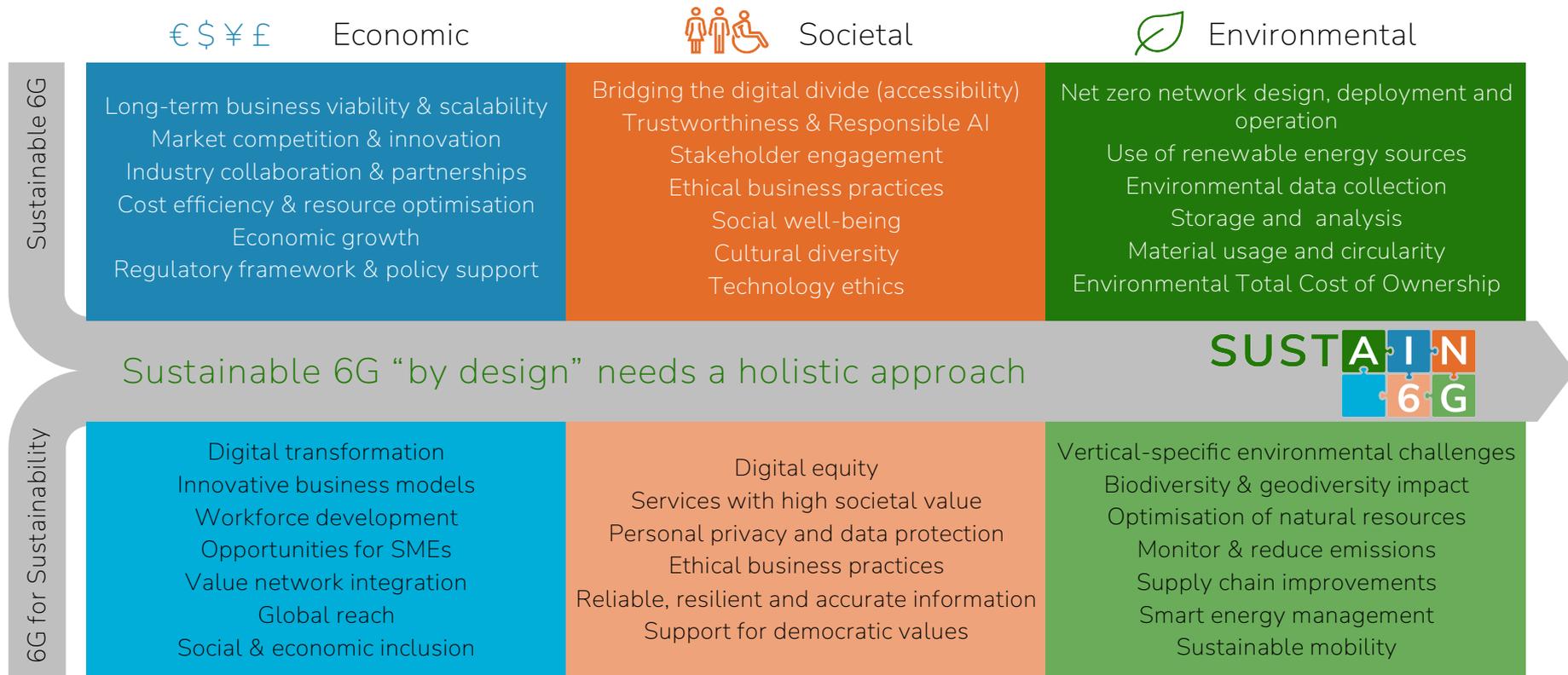
Motivation

Key questions on sustainability in the context of 6G



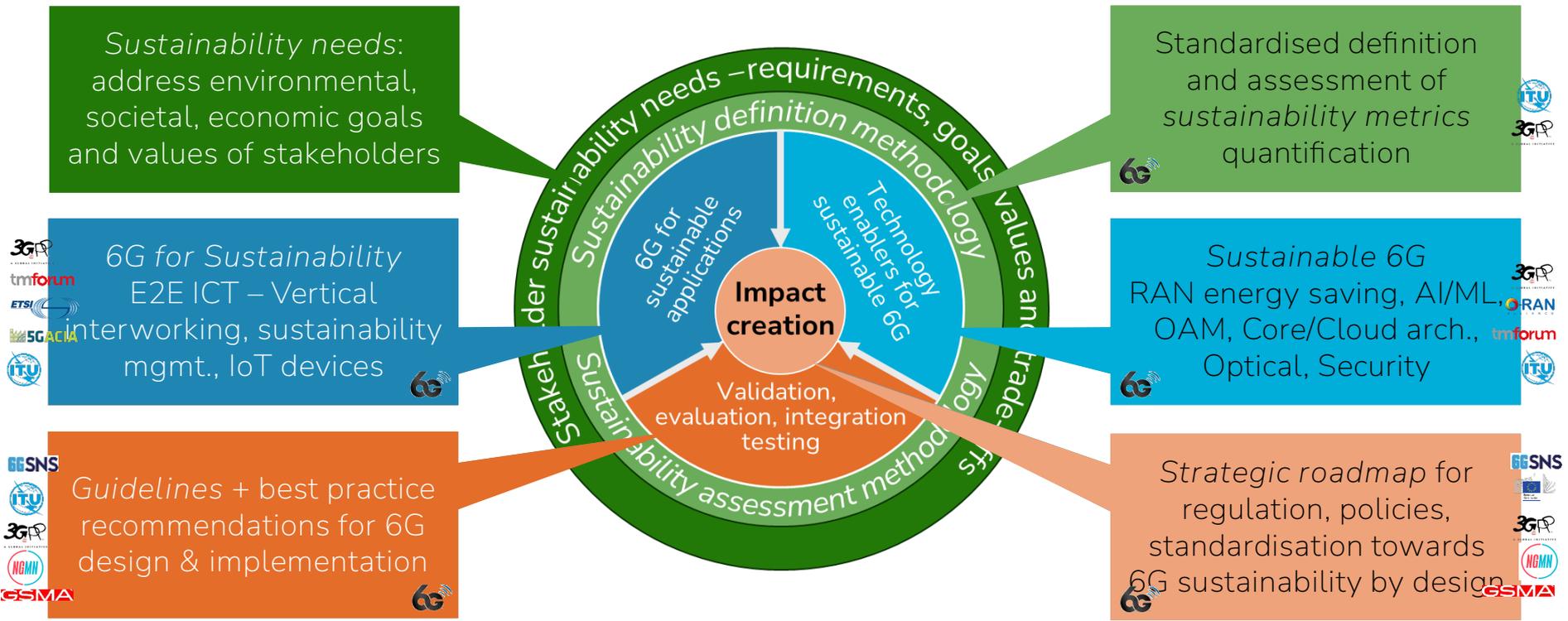
Approach

The “Six Dimensions” of Sustainability in the context of 6G



Approach

Sustainable 6G “by design” needs to look at the whole ecosystem



Objectives

1 Identify and understand sustainability needs and values
Review, consolidate and define sustainability goals, values, indicators based on stakeholder requirements
Build a comprehensive inventory of 6G and relevant vertical UCs' concepts, technologies, components including their relevant KPIs and sustainability indicators

2 Define methodologies for sustainability definition and assessment
Review and enhance concepts, processes, methodologies, and tools for holistically defining and assessing sustainability

3 Enhance integration of vertical UCs with 6G to jointly reduce footprint and maximise handprint
Analyse, develop and deliver vertical UCs integrating 6G and enabling technologies to improve sustainability values
Develop and deliver Sustainability Management Plane (SMP) to enable E2E integrated sustainability-driven operation across network and vertical domains

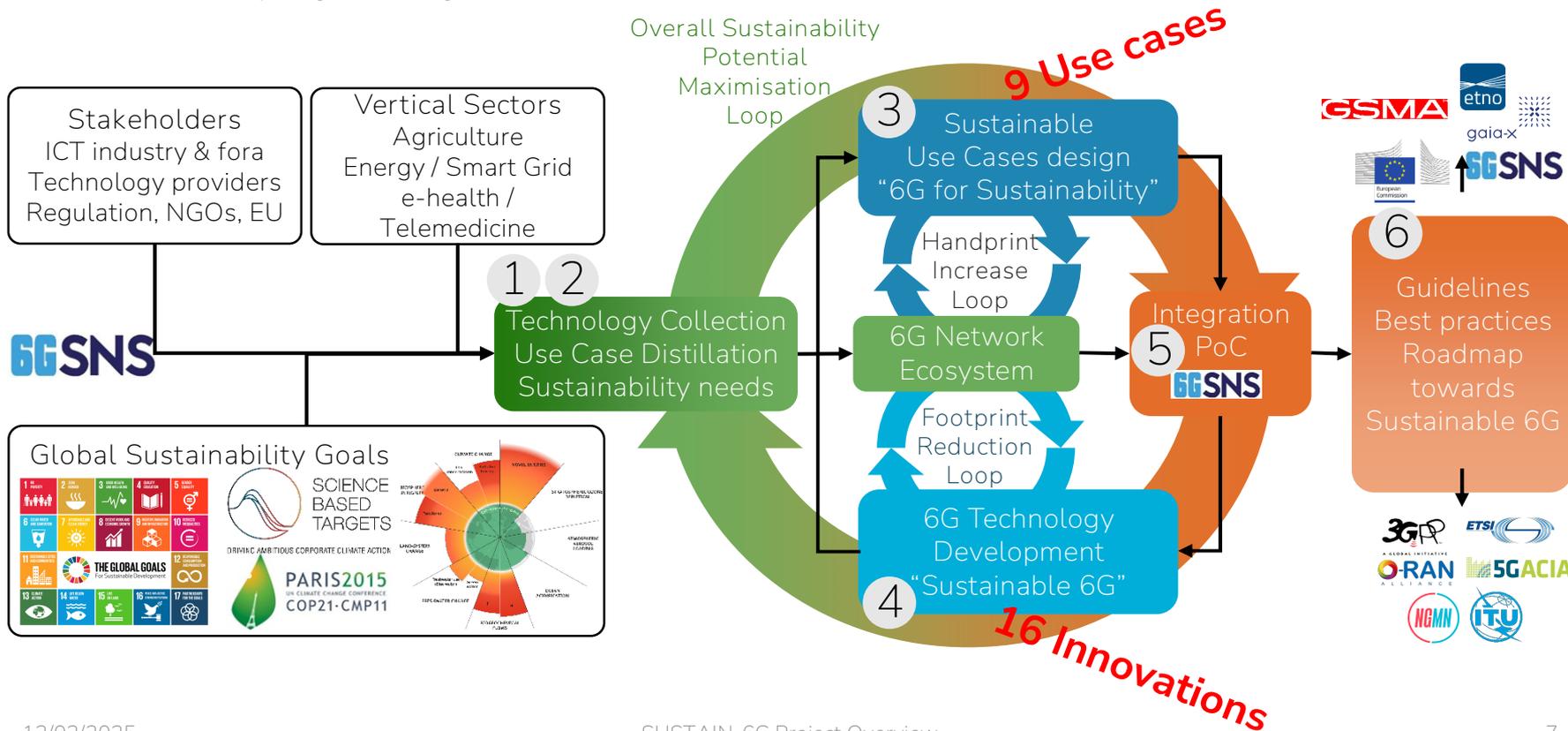
4 Enhance 6G technologies to reduce footprint and increase handprint
Develop and deliver solutions and enhancements for selected 6G technologies and components towards sustainability improvements, by reducing 6G footprint and increase handprint in vertical sectors

5 Validate, evaluate, and demonstrate sustainability value
Validate 6G technologies on their impact to sustainability (positive / negative)
Evaluate and demonstrate methodologies, concepts, and solutions on applicability, implementability, and wrt. sustainability impact

6 Impact generation, sustainability guidelines and strategic roadmap
Create impact through dissemination, standardisation, exploitation, by consolidating outcomes towards guidelines, best practices, business models and a strategic (standardisation and regulation) roadmap, to drive the development of 6G in a sustainability-integrated direction

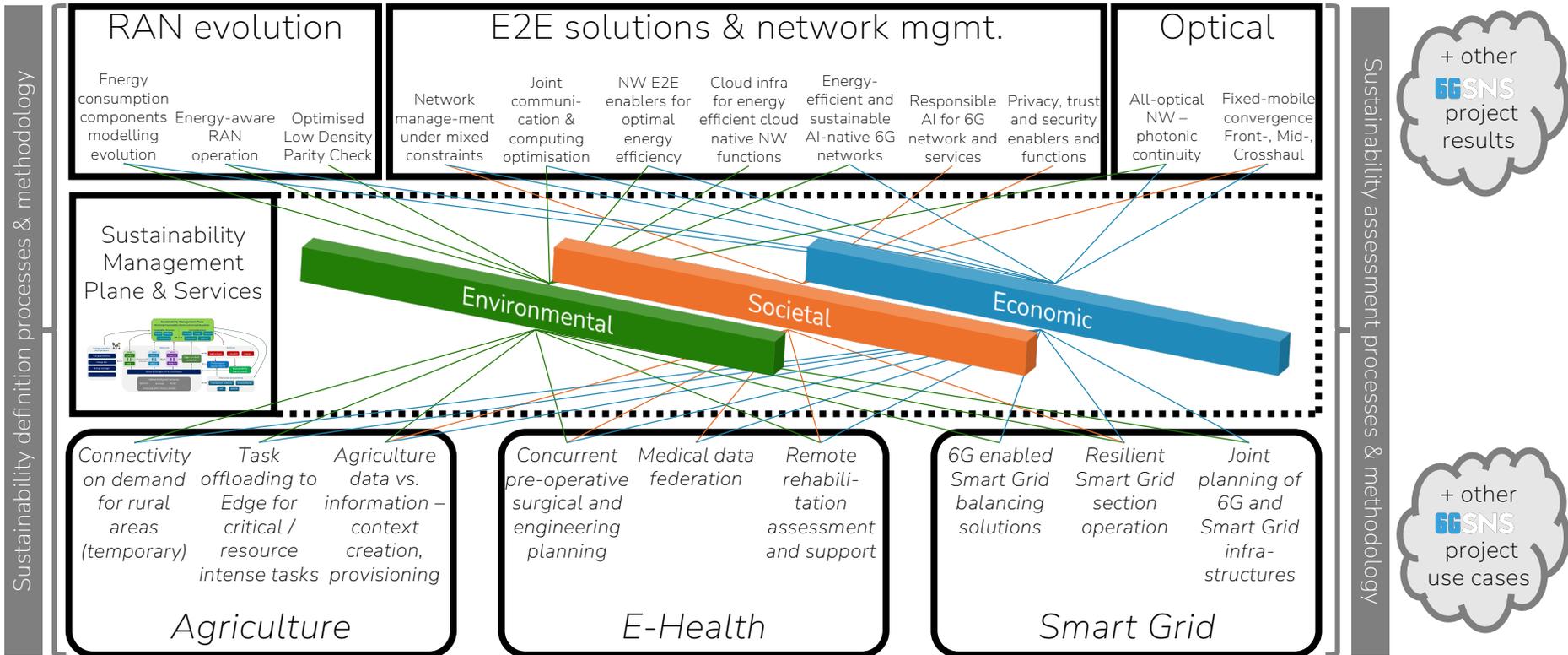
Methodology

In relation to project objectives



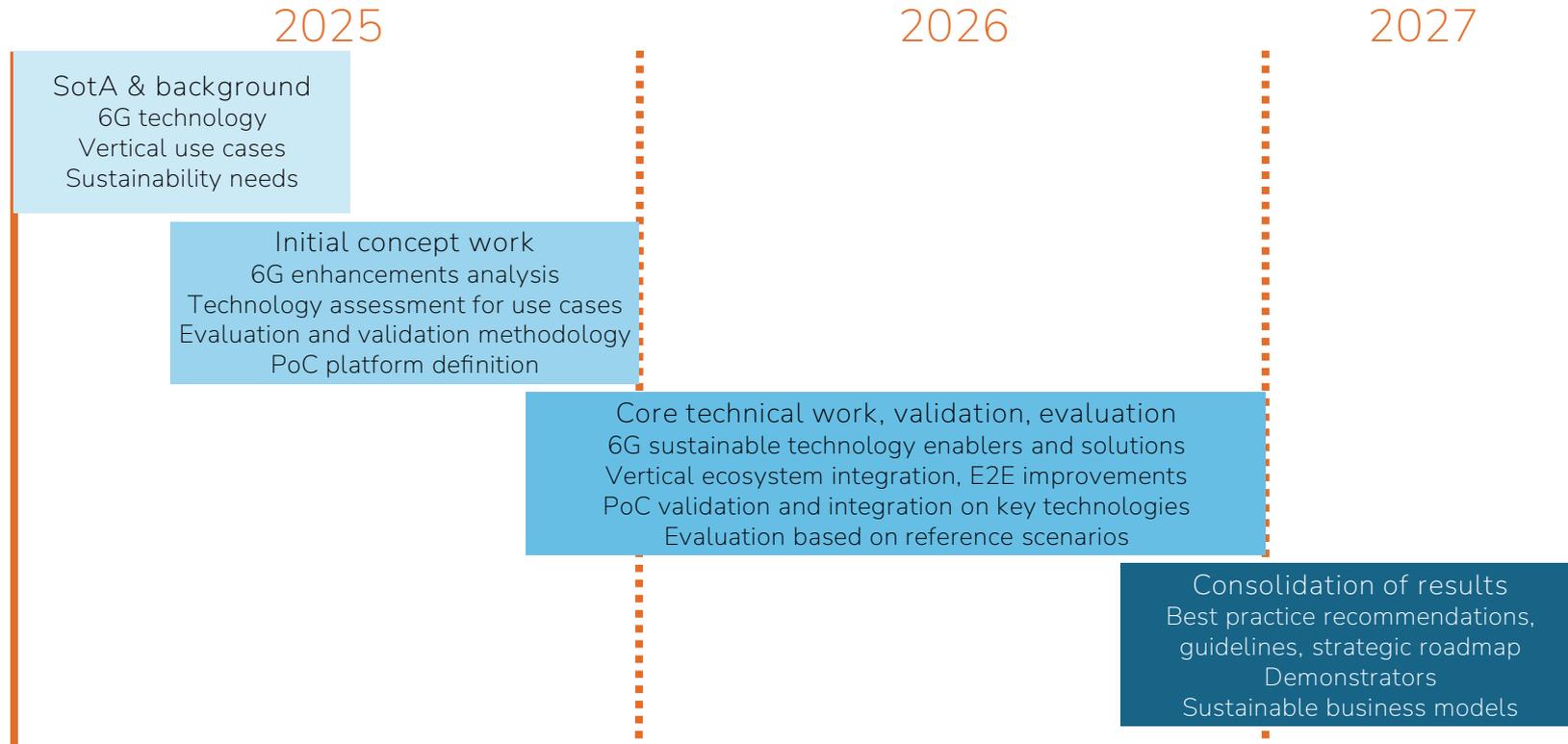
Research, Innovation, Impact Generation

Key relations between enablers, use cases and sustainability dimensions



Timeline

Project phases





<https://sustain-6g.eu>



<https://www.linkedin.com/company/sustain-6g/>



<https://www.youtube.com/@SUSTAIN-6GProject>



<https://cordis.europa.eu/project/id/101191936>

SUSTAIN 6G Disclaimer



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