

Establishing Commercial Fusion Energy In Europe

Complementing solar and wind for a full
renewable energy mix

12th September 2023

Uniting the best from private and public sector

FUSION WITH INTEGRITY

Founders



Management combines industrial and scientific excellence

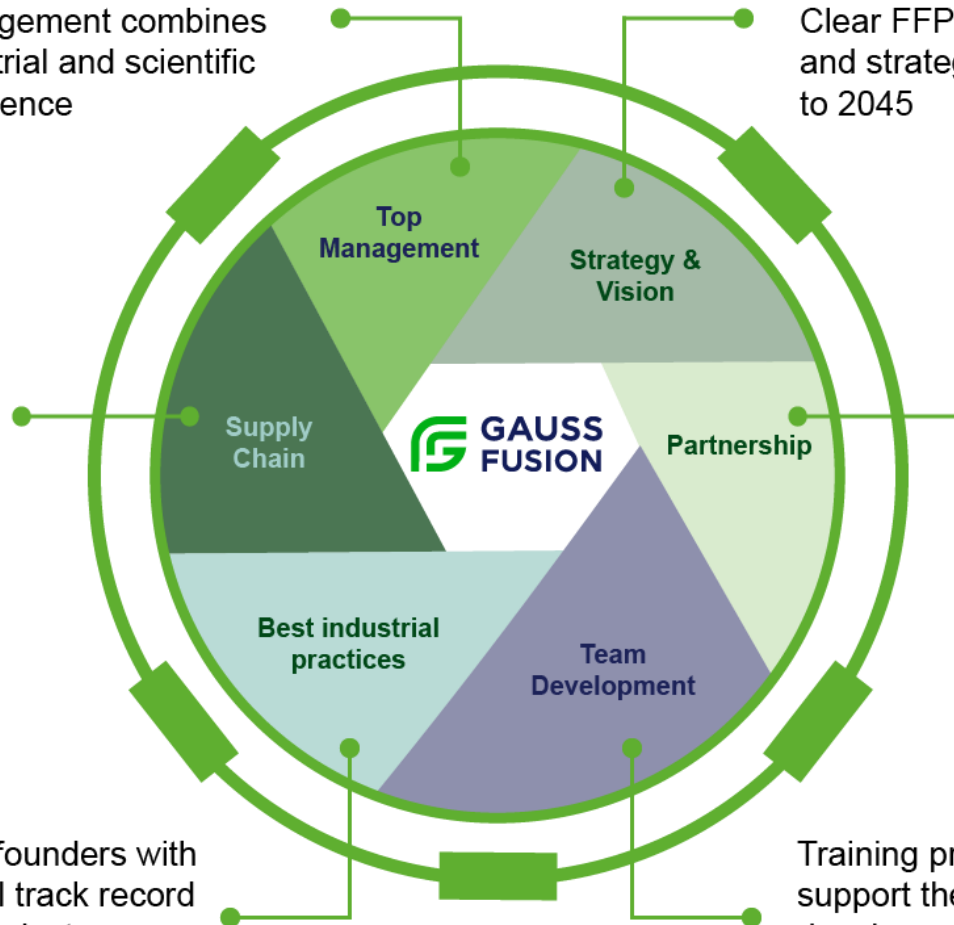
Clear FFP vision and strategic roadmap to 2045

Full European technology and supply chain for strategic energy independence

Partnership with leading European institutions

Industrial founders with successful track record in fusion industry

Training programmes to support the growth and development of talents

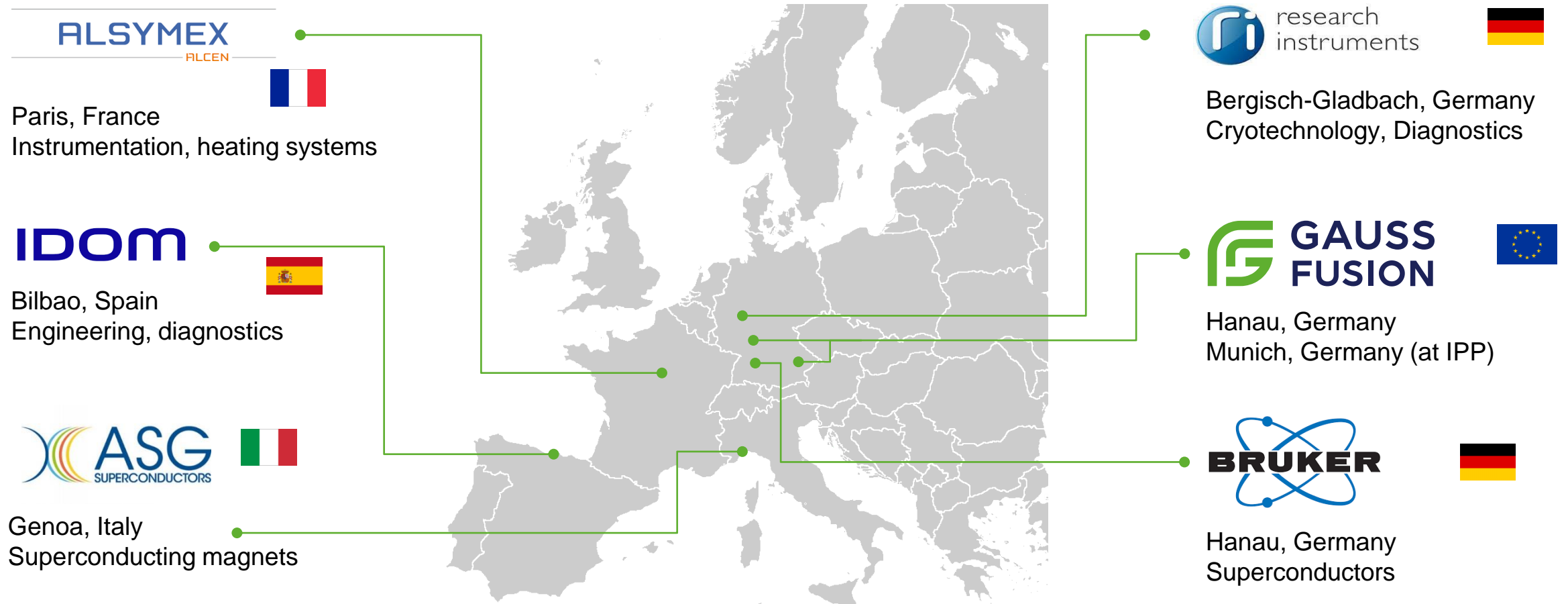


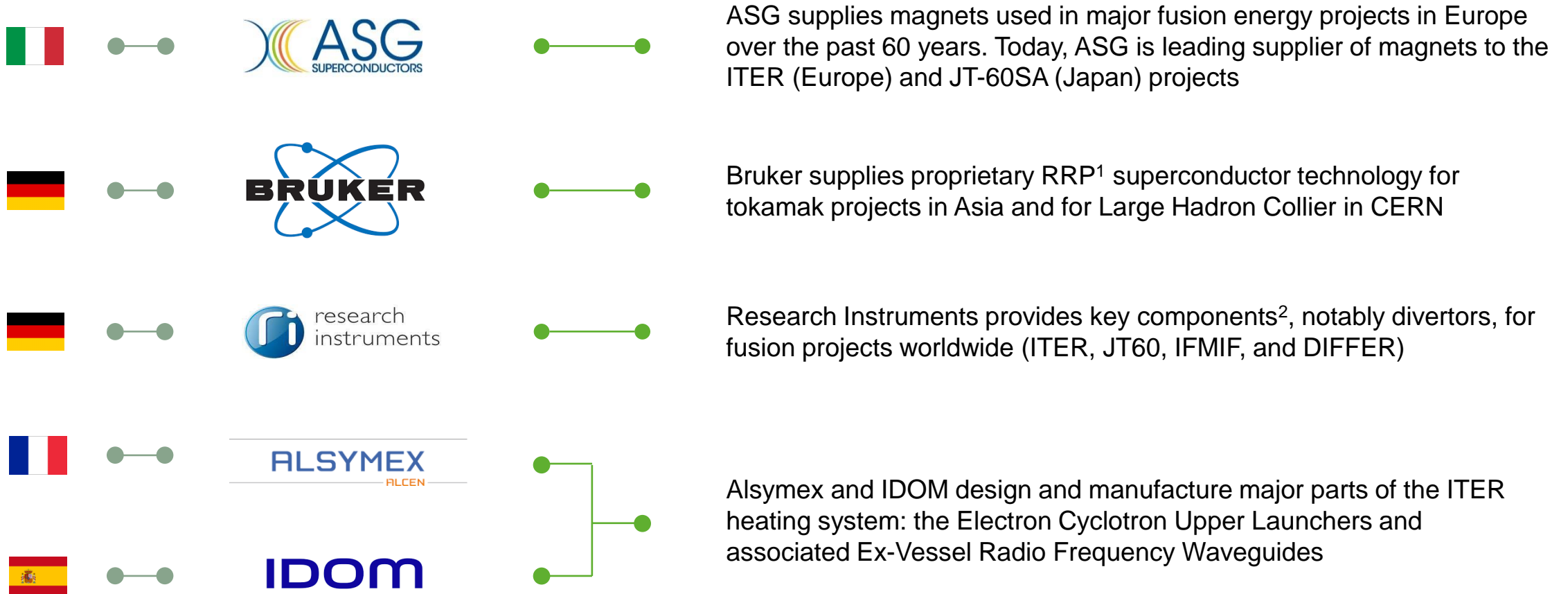
Partnerships



... further partnerships in discussion

Already key industrial players in the fusion ecosystem today





1. Rod-Restack Process

2. Torus and Cryostat Cryopumping System (TCCS), Cryogenic distribution system, Inner Vertical Target (IVT), Accelerating grids for neutral and diagnostic beam injection systems, Warm Regeneration Box (WRB)

World-class fusion energy industry players supported by a high-profile scientific advisory board

Chairman of the Supervisory Board

Frank Laukien



With a strong science and business background, Frank has been serving as the CEO of Bruker Corp. since 1991

Supervisory Board

Comprises CEO, chairman and members of the board of directors in leading fusion industry players:



Strategic & Scientific Advisory Board

Comprises director, deputy director or division head in leading institutes:



Capitalizing on mature technologies, innovating as needed, creating intellectual property

— Technology approach



Core fusion-specific components

- Use existing state-of-the-art and mature technologies to the best extent possible
- Focus innovation on key critical components
- Test the components individually with progressive integration



Additional fusion-compatible components

- Use only mature technologies
- Test the components in an existing integrated set-up



Gauss Fusion will drive the creation of intellectual property through innovation

Three key areas for innovation and IP creation:



Magnets



Materials



Tritium Breeding Blanket



Heating technology

To be further detailed

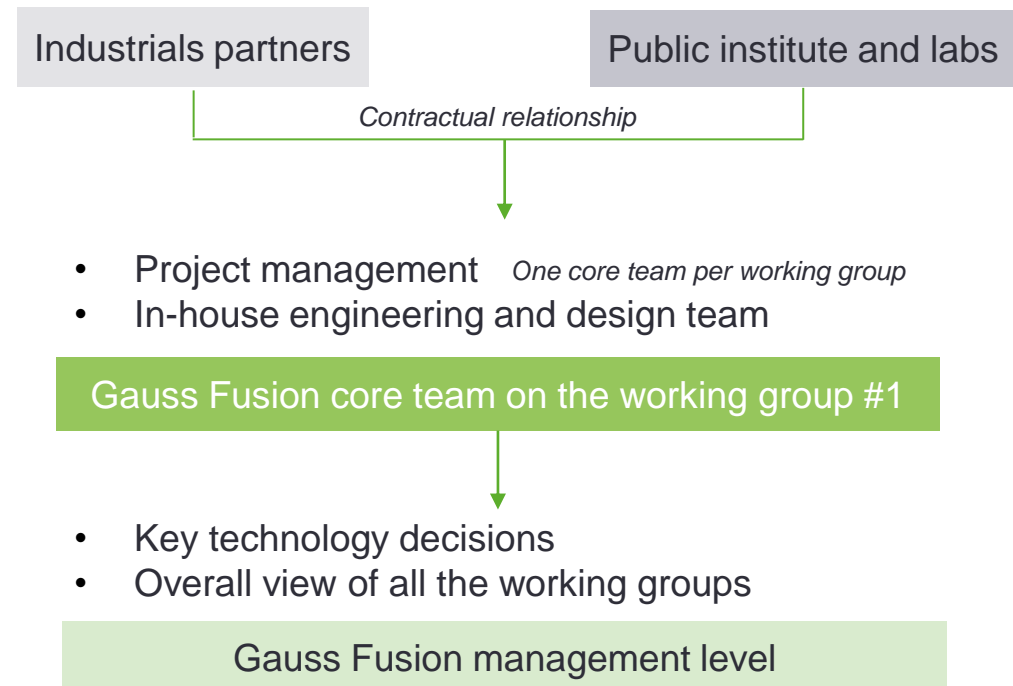
Addressing the key areas for the construction of a Fusion Power Plant

Five working groups within Gauss Fusion

1. Device design
2. Tritium breeding blanket
3. Materials
4. Magnets
5. Site configuration



Organization of the working groups



Taking a reliable and scalable approach, striking a balance between technological complexity and pragmatical delivery deadlines

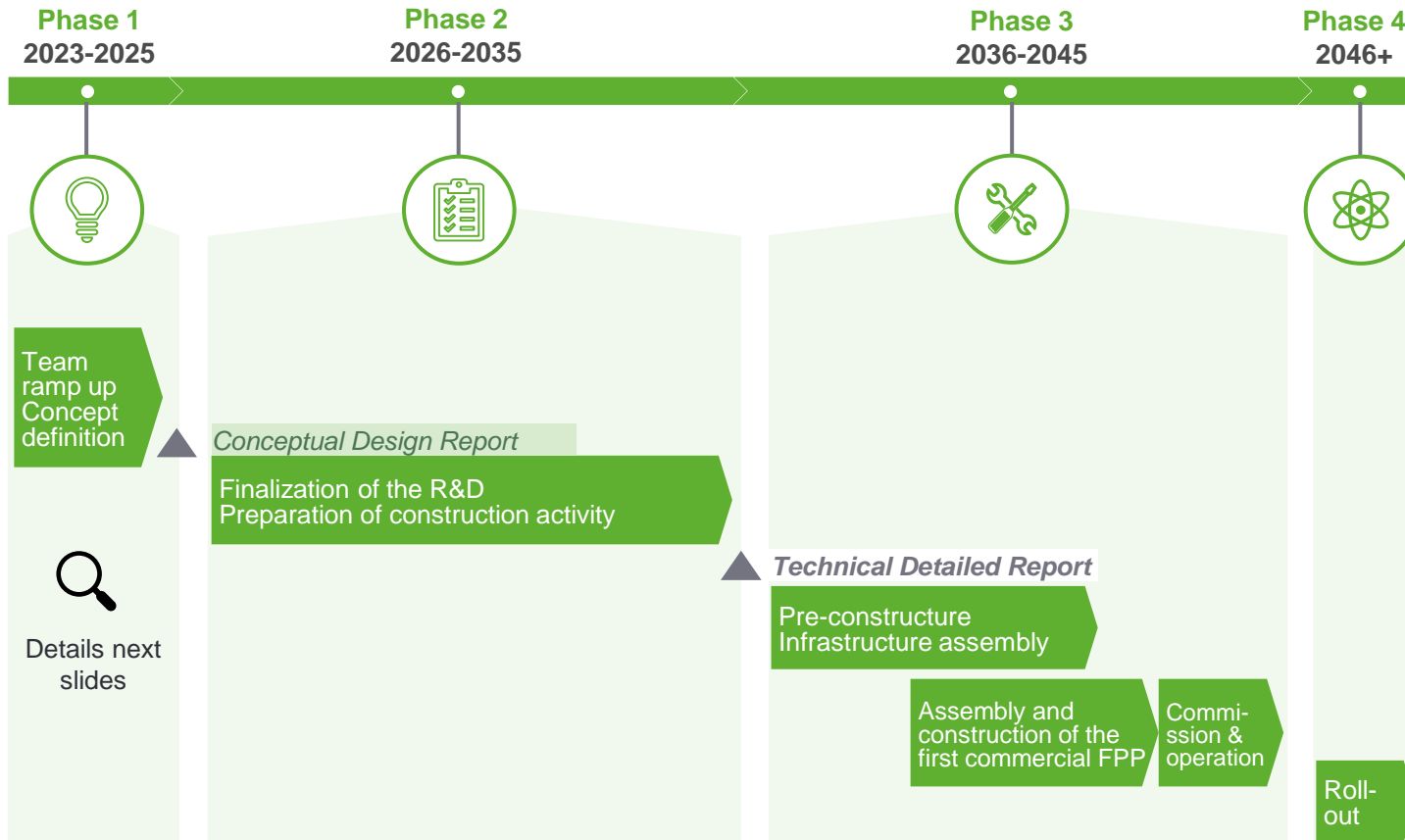
Commentary

Reliable commercial fusion energy before 2045 seems unrealistic, as building FPP still requires around two decades of investment in research and construction:

“With substantial resources, some experts believe that fusion may be able to provide electricity to the grid within 10-20 years, while others states that fusion will take more than 20 years to become a reality.”
The US Government Accountability Office¹, 2023

“Fusion power plant should be able to be achieved within few decades.”
LLNL Director Dr. Kim Budil², 2022

“In contrast to the overly aggressive timelines pursued by private players, [...] a realistic roadmap with a 20-year horizon around 2045 to 2050 for demonstration.”
Chair of EPFL, Ambrogio Fasoli, 2023



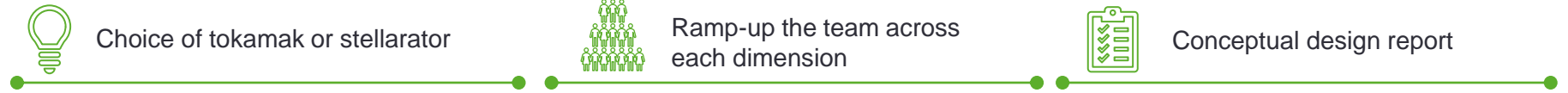
Delivering technical and industrial feasibility while innovating and generating IP

Phase 1 : Conceptual design phase

Key next steps



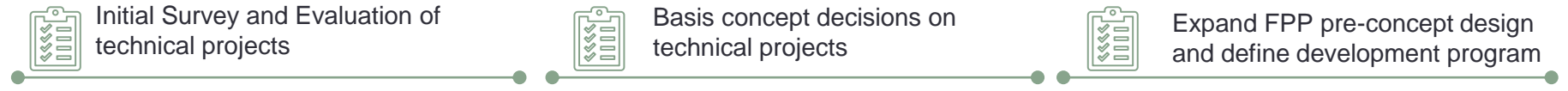
Overall approach



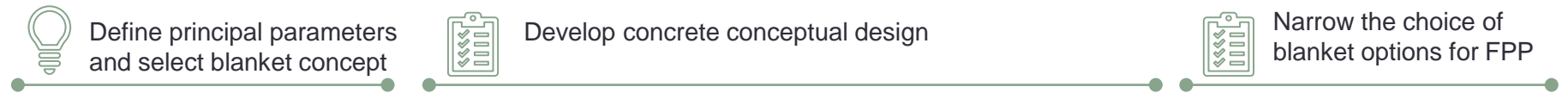
IP generation



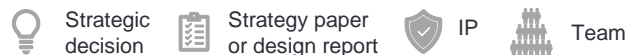
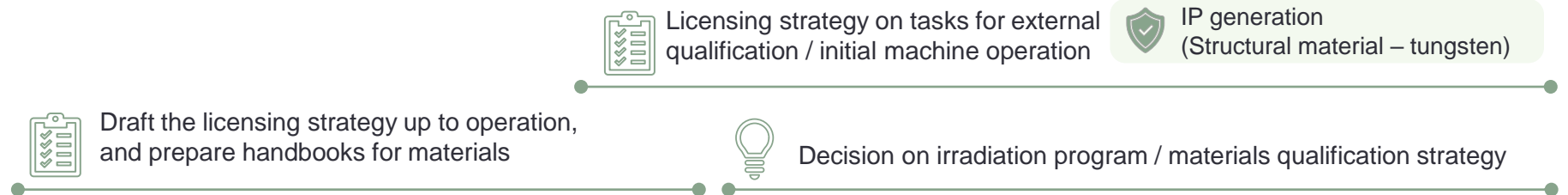
Magnets



Tritium Blanket

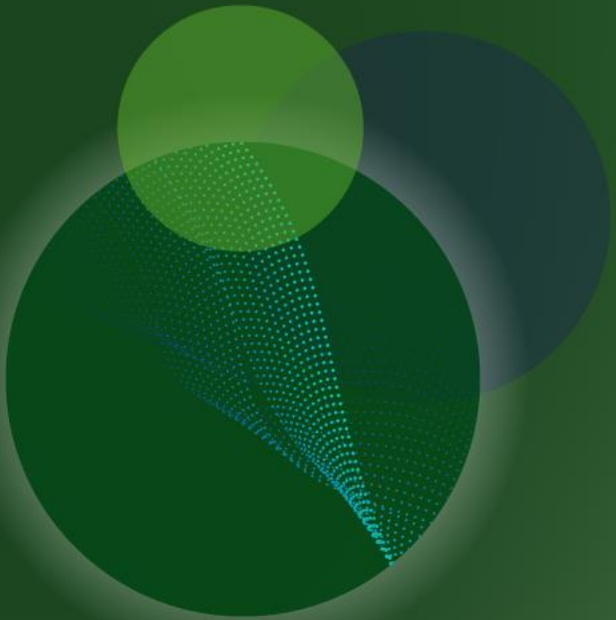


Materials



Invest in Europe's fusion champion and trigger the next energy revolution

- 1 Wind and Solar alone won't solve the planet's problem
- 2 Fusion is the answer to the big energy question
- 3 European fusion market has a huge economic potential (over a trillion euros)
- 4 Gauss is using the most mature designs and technology available
- 5 Gauss Fusion is unique: combines industry and science



*We have the physicist to build the right thing
and
we have the industry to build the thing right.*

The time is now





Thank you for your attention



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