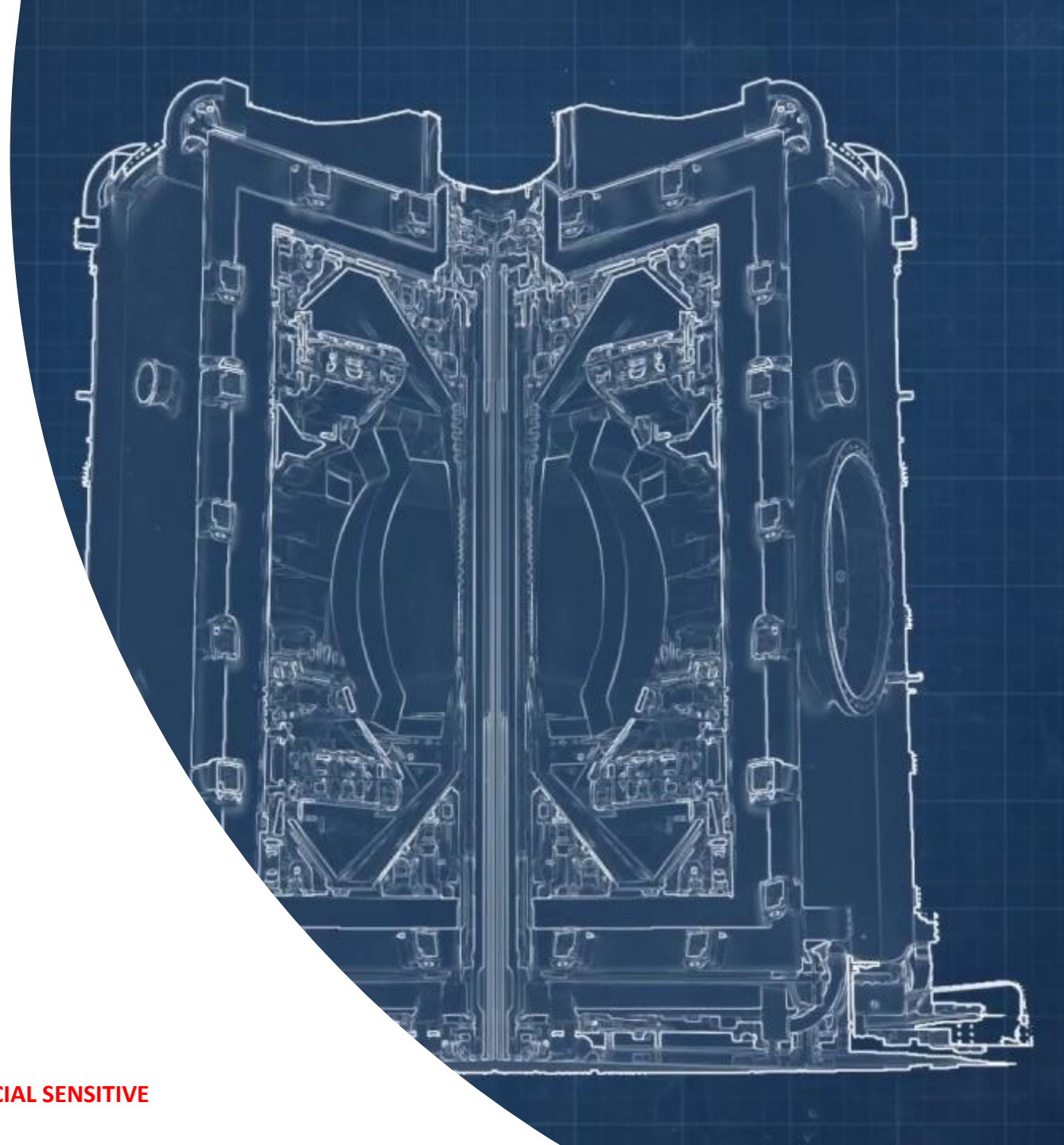


Delivering fusion – creating space to innovate

July 2022

OFFICIAL SENSITIVE



Overarching UK Fusion Energy Strategy

Capitalise on the UK's capability in fusion R&D to develop, commercialise and export fusion power generation technology for the economic and societal benefit of the UK and the world.

Principles

Momentum & Direction

International
Leadership and
Collaboration

Scientific Leadership

Commercial Leadership

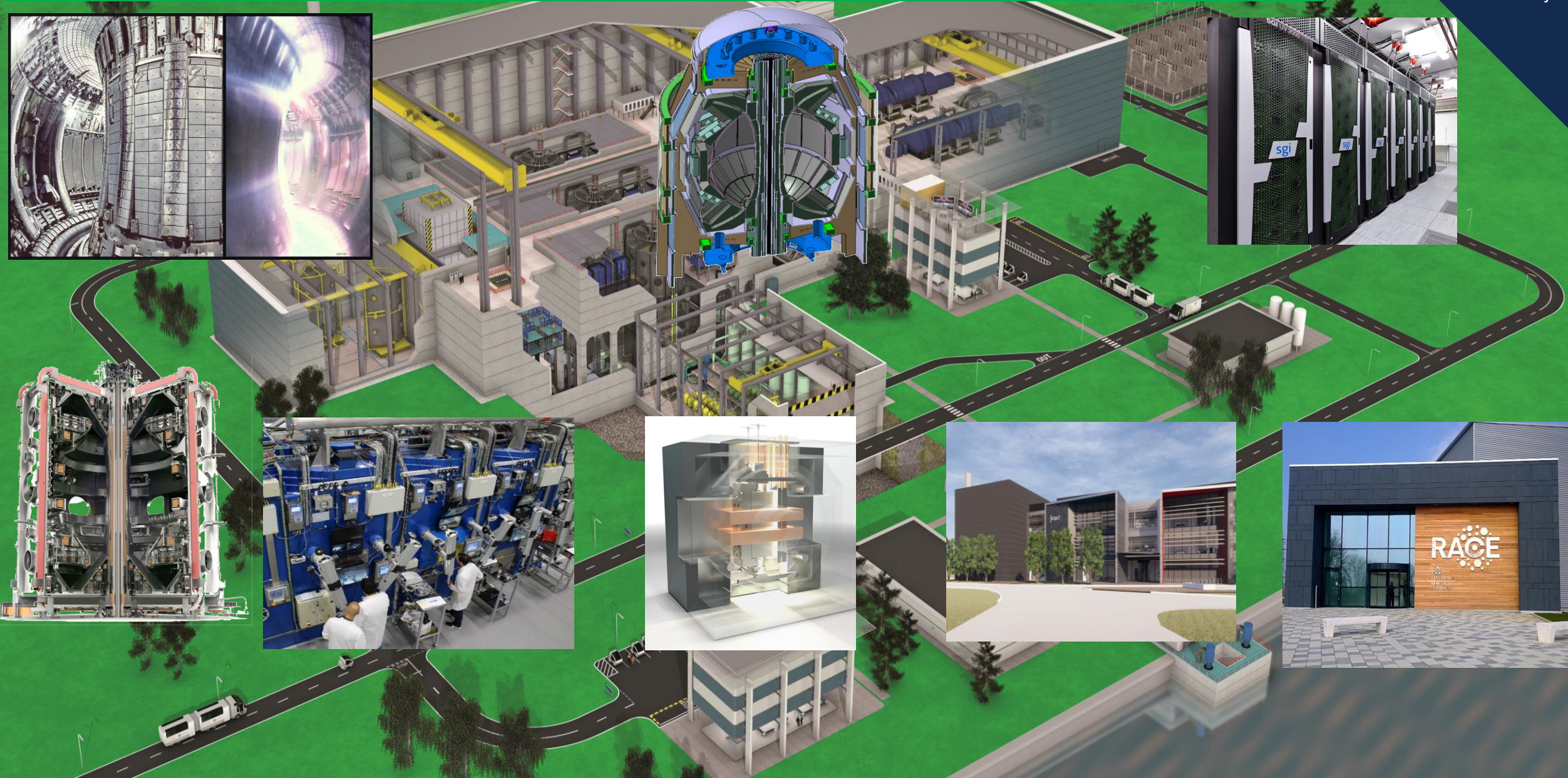
Regulation

Scientific leadership – role of government

Objectives:

- Correct market failure(s) – capability building
- Provide convening power – building networks
- Enable collaboration – internationally and nationally

SCIENTIFIC LEADERSHIP AND UNIQUE CAPABILITY



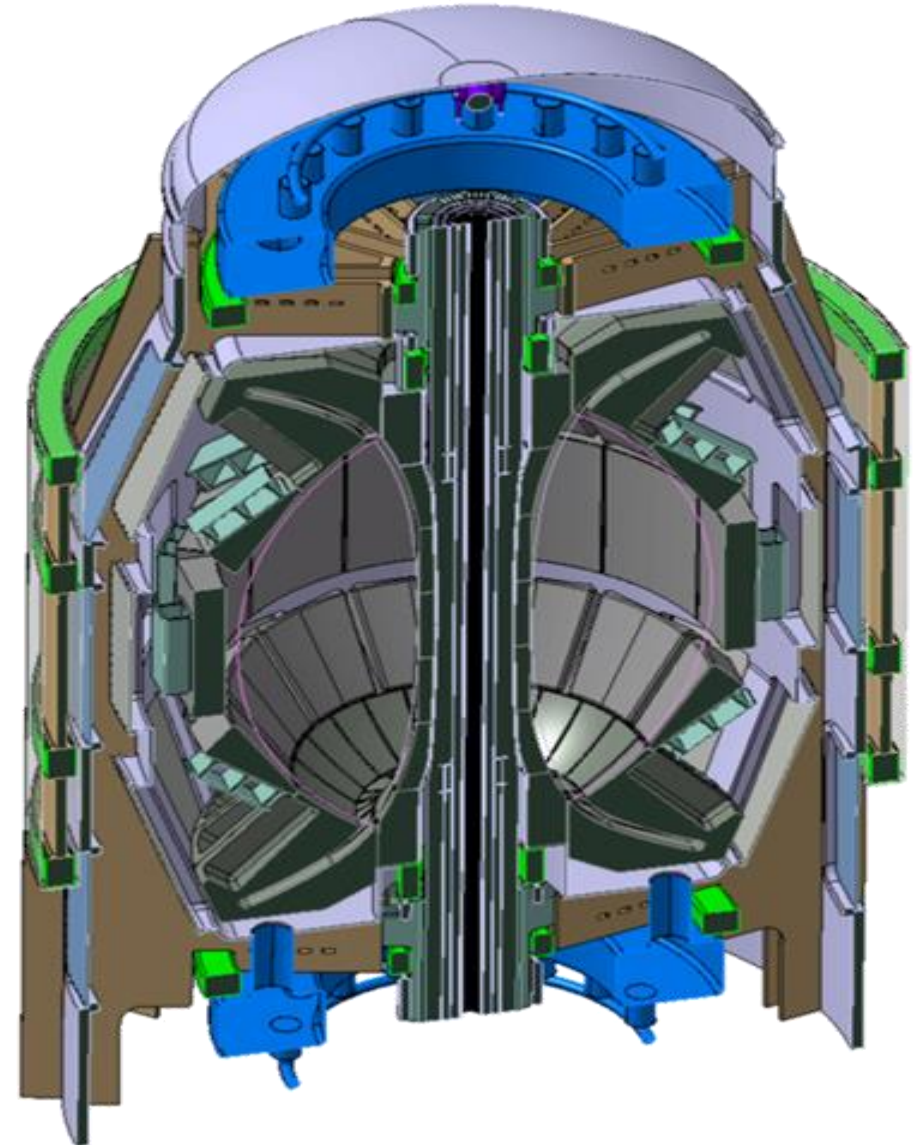
Commercial leadership – create the space

Objectives:

- Stimulate R&D investment – risk management
- Convene the sector – Anchor project
- Agglomeration effects – create the community
- Provide the environment

Spherical Tokamak for Energy Production (STEP)

- Predictable net electricity production
- Lower capital cost than other fusion reactor designs
- As well as overcoming technical challenges, the STEP programme will only succeed with relevant enabling actions from HMG
 - Site selection
 - Regulatory environment
 - Delivery vehicle



Stimulation not competition

- Most SMEs are tightly focussed – anchors allow whole plant design
- Anchor projects allow SMEs to “plug-in”
- Develops a supply chain
- Provides investor confidence

Regulation

Why

- Developers need clarity on licensing and permitting
- Investors need certainty
- Public needs assurances around new technology
- Chance for pro-innovation approach to fusion regulation

What are we doing?

- Launched a Green Paper on 1st October.
- Legislation introduced in Energy Bill in July 2022

Final Thoughts

- Audacity
- Credibility
- Flexibility