



Future Circular Collider

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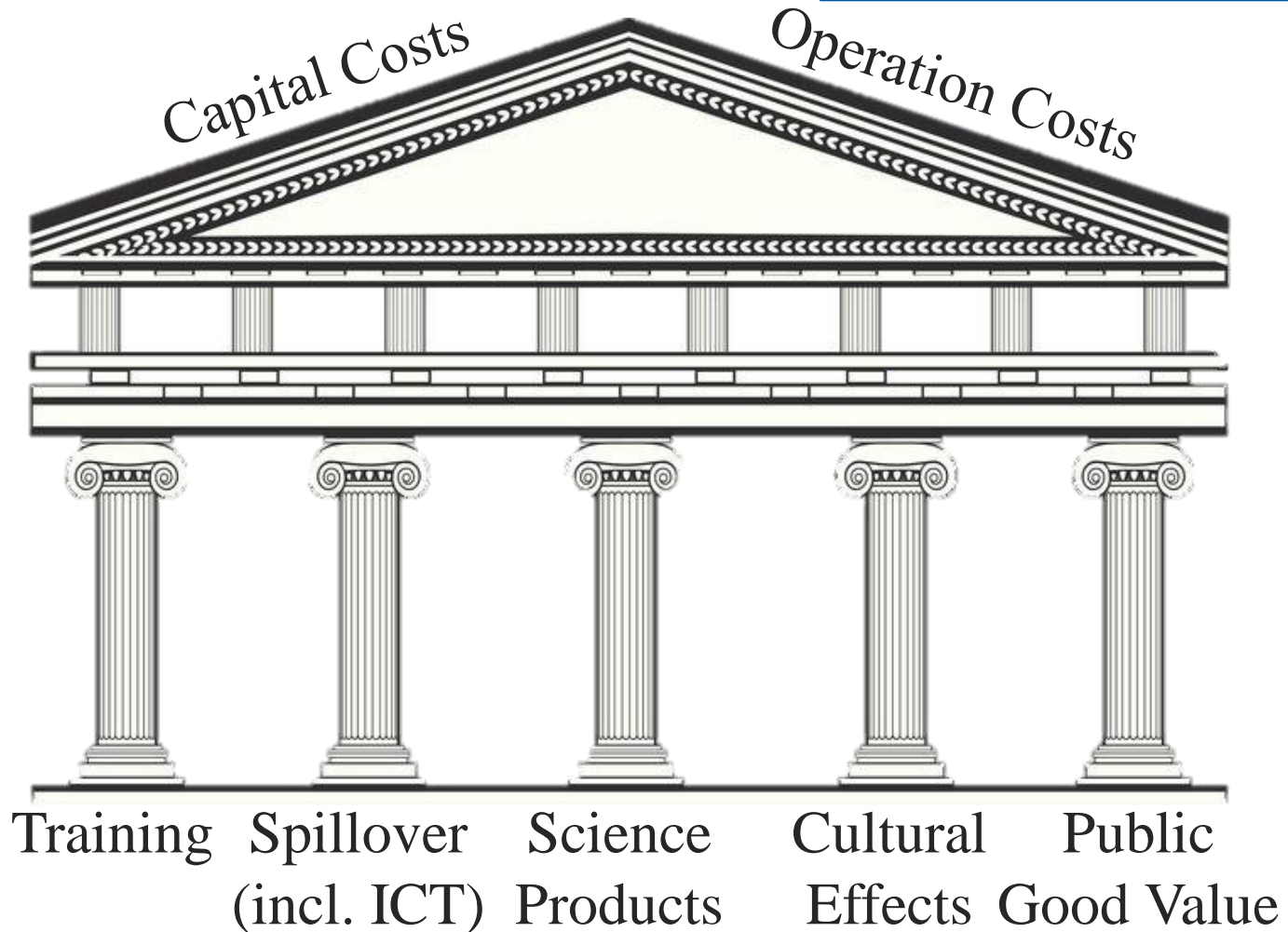


Future Circular Collider Study

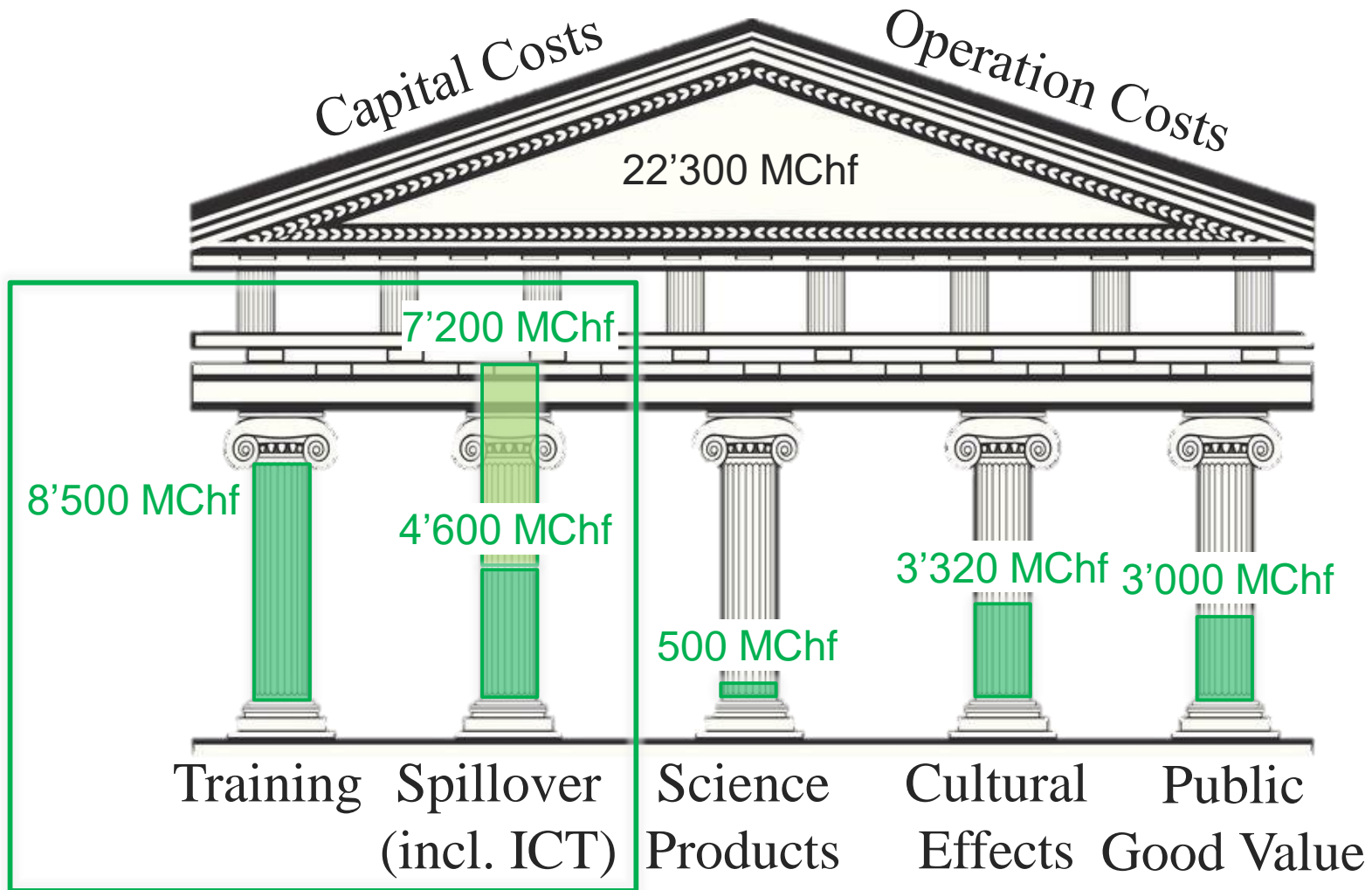
- **Conceptual Design Study**
- **For a post-LHC Research Infrastructure**
- **Carried out with > 130 institutes worldwide**
- **Launched in 2014**
- **Hosted and coordinated by CERN**
- **Conceptual design report released in 2018**

Impact Architecture

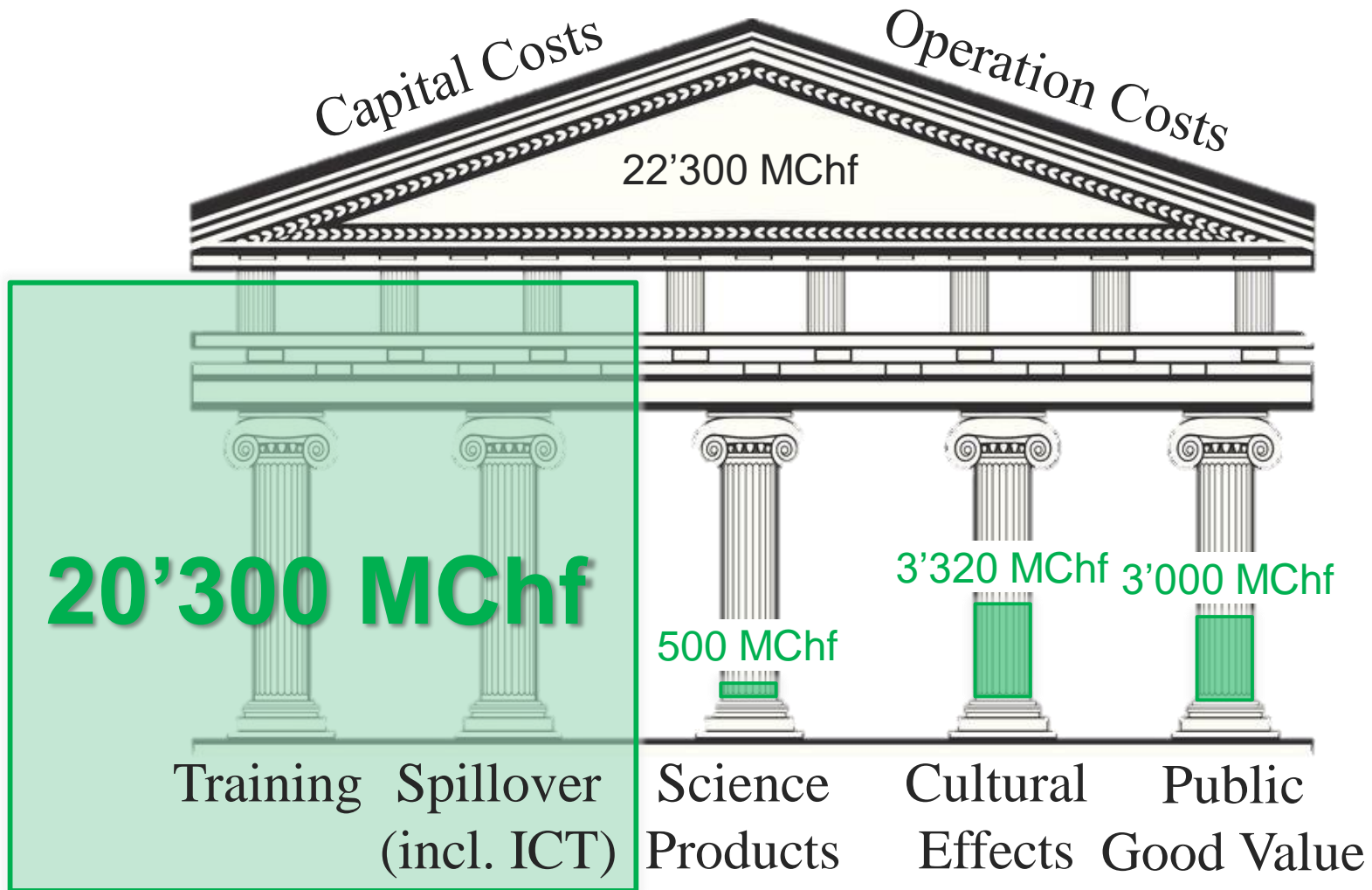
Launched by Future Circular Collider (FCC) study. Independent study by University of Milano (Italy) and Center for Industrial Studies for HL-LHC project as basis for future project assessments.



Socio-Economic Impact Estimates



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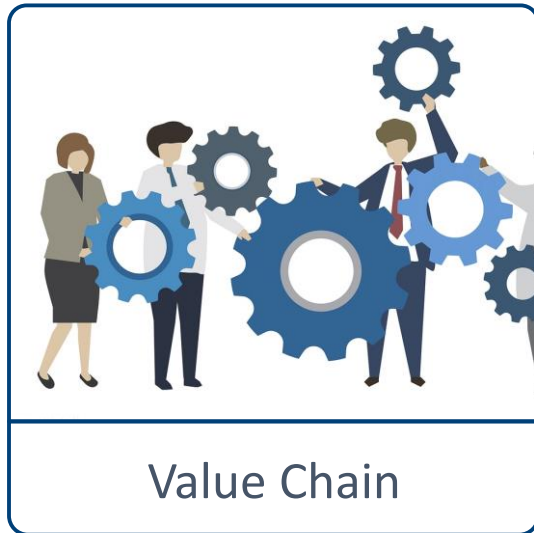


Mining the Future



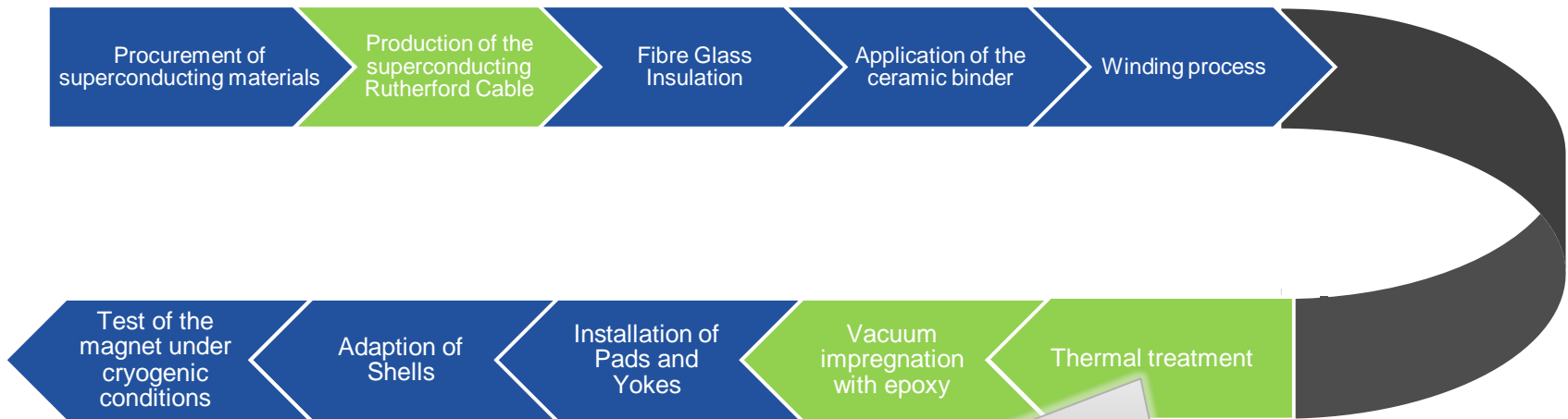
- The positive effects on industrial cooperation partners stem primarily from
- **learning effects** leading to better know-how
 - **improved reputation** for challenging projects
 - **enlarged customer base** through international exposure

The Benefit of the Value Chain

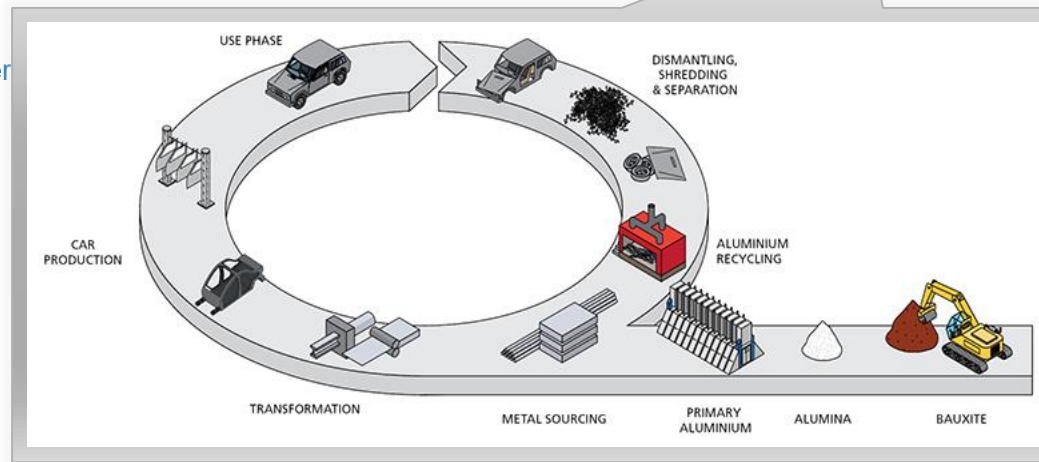


- **Impact potentials spread across the entire value chain of a topic!**
- Therefore, need to analyse the value chain of each topic not to remain bound to the “object of technical interest” (magnet, cavity, detector, tunnel, ...)

Superconducting Magnet Value Chain Example



Legend:
 ● unselected processes
 ● selected processes for further analysis



Our Aim

Advance technologies together with partners involved in industrial R&D so that FCC can be built and operated in a sustainable way and industrial spillovers are created.



Hermann Hauser, 23.8.2016, physicist and entrepreneur
Founder of ARM, BBC Micro, E*Trade, XMOS and many more



Technologies

Growth can only come from the high-tech sector

Advant

Preparing the Grounds



Identify domains of need for the particle accelerator & experimental physics communities.



Match needs with the interests of key actors involved in industrial R&D **along the value chains.**



Develop the conditions on which technological advancements and spillovers can grow.