

Imperial – TUM Zero Pollution Network

Connecting London and Bavaria Science & Tech Ecosystems

The Imperial-TUM Zero Pollution Network will bring together scientists, industry, governments and other partners in London and Bavaria to develop and translate radical technologies and solutions to some of the greatest sustainability challenges, to tackle the combined threats of global pollution, biodiversity loss and climate change.

The aim of this new network is to enable society to shift towards a zero pollution economy where the environmental and health impacts of global pollution are mitigated at source – designing technology interventions in a holistically sustainable framework. This approach considers pollution throughout its lifecycle – from the way raw materials are sourced, to how they are used in industry and consumed by society.

Global Pollution Solutions

We will lead transformative work across disciplines and with external stakeholders to tackle key challenges areas. There will be an initial research focus on **electrochemistry and energy storage technologies, sustainable manufacturing, and sustainable future mobility** – with further themes developing over the next 2 years. The new network will exploit the already strong research collaborations between the organisations including our collaborative PhD programme. We will work together to support student entrepreneurs to develop businesses.

The Imperial – TUM Zero Pollution Network will initially build on collaboration formats that have been successfully developed and tested through the Imperial – TUM Flagship Partnership.

- Imperial-TUM seed funding for joint research projects
- Joint training academies for PhD candidates and postdocs
- Visiting research fellowships, joint appointments, student research placements
- Joint entrepreneurship programmes and industry engagement e.g Global Challenge Hackathon on SDG7 – Affordable and Clean Energy
- Joint teaching and experiential education initiatives

Launch of an Imperial-TUM Zero Pollution Seed Fund to accelerate the most innovative ideas and technologies that offer ‘disruptive impact’

The Network Aims are to:

- Develop London-Munich joint research labs and/or industry research centres
- Develop high-impact international doctoral training clusters in zero pollution challenge areas
- Exploit synergies between UK Net Zero Strategy and German High-Tech Strategy
- Position for ambitious joint funding applications under Horizon Europe and other national and international programmes
- Explore co-location options for research activity in Munich and London and strategic joint appointments and research chairs
- Co-develop training and education opportunities for emerging and future sustainability leaders



“The scale of the challenge is enormous. Human-made pollution is visible everywhere from air pollution in our cities to plastics in the deepest parts of our oceans. This ambitious London-Munich Network will consider pollution in all its forms, including carbon dioxide, and take a systems-thinking approach to the way we do research and translate technologies.”

MARY RYAN, Vice Provost for Research and Enterprise, Imperial

“Universities are the ideal ecosystems to analyze processes and requirements and to give recommendations that help make a sustainable and pollution-free society a reality. This challenge is not just for one university or one country, however, it is a topic of global relevance. To have the strongest impact, TUM is joining forces across national and institutional boundaries by working together with our flagship partner Imperial College London. We anticipate many exciting research results and new technologies through the launch of the Zero Pollution Network.”

GERHARD KRAMER, Senior Vice President for Research and Innovation, TUM

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