



Driving a new era of UK-India innovation

Introducing ITES: The UK-India clean energy and transport accelerator





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Lead partners



Programme partners and collaborators



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About ITES – Innovating for Transport and Energy Systems

ITES is the UK-India clean transport and energy accelerator – and part of the landmark UK-India science and innovation partnership. ITES fuses bilateral strength, scale, expertise and influence to drive innovation, drastically reduce emissions, and catalyse clean growth for both nations.

Why ITES matters

ITES is tackling one of the future's toughest challenges – decarbonising transport and the energy systems that power it. Transport is the fastest-growing source of emissions globally, accounting for around 20% of greenhouse gases. Decarbonising this sector requires not only innovative, affordable transport solutions, but also a secure energy system capable of meeting the rising demand for renewable energy. It's a huge technical challenge, but an even bigger economic and environmental opportunity for the UK and India.

What ITES does

To scale UK-India solutions, and seize the health and wealth benefits for people and planet, ITES:

- Provides UK-India SMEs, industry, academics and investors with unrivalled access to world-leading innovations and the world's fastest-growing markets.
- Fosters faster translation of transformative clean technologies into other markets through bilateral business support,

knowledge exchange, and government-backed collaboration projects.

- Promotes a whole-systems perspective to unlock the transition's most critical catalysts – from capital to consumer acceptance – and derisk innovation.
- Creates and mediates 'superpower' partnerships between innovators, industry, researchers, investors, and policymakers to support UK-India Net Zero leadership.
- Enables market-first solutions by unlocking innovative finance and investment.

Who supports ITES

Funded by Innovate UK and the Department for Science, Innovation and Technology, ITES is led by Energy Systems Catapult in the UK and the Indian Institute of Science. ITES is a key pillar of the UK-India Net Zero Innovation Virtual Centre – the home of bilateral Net Zero innovation across green hydrogen, manufacturing, and transport and energy systems.

Partner with us

Whether you're an innovator, policymaker, researcher, investor, or industry leader, ITES provides the connections, insights, and support to turn prosperity-driven partnerships into commercial success, green growth, and brighter futures. Join us at the forefront of a new era in UK-India collaboration.

Contact us: info@ites.org



An unbeatable combination

Prime Minister Narendra Modi, on the UK-India science and innovation partnership



Supercharging UK-India innovation

Targeting the toughest market challenges

ITES brings together UK and Indian innovation, expertise, and market strength to scale urgent, affordable, accessible clean energy and transport solutions.

We work closely with Indian businesses, policymakers, researchers and investors to identify the biggest innovation priorities. By driving solutions in sync with market need, local contexts, national challenges, and global ambitions, ITES supports SME growth and innovation – and the faster adoption of critical Net Zero technologies.

ITES is helping leaders to tackle the biggest barriers to a lower-carbon future:

Hydrogen

- Tech advancements for fuel cells
- Underdeveloped distribution network
- Unique infrastructure costs
- Standardised fuelling protocols

Energy storage

- Supply chain shortfalls
- Poor battery recycling and repurposing options
- Few insights to improve performance

Electric vehicle (EV) infrastructure

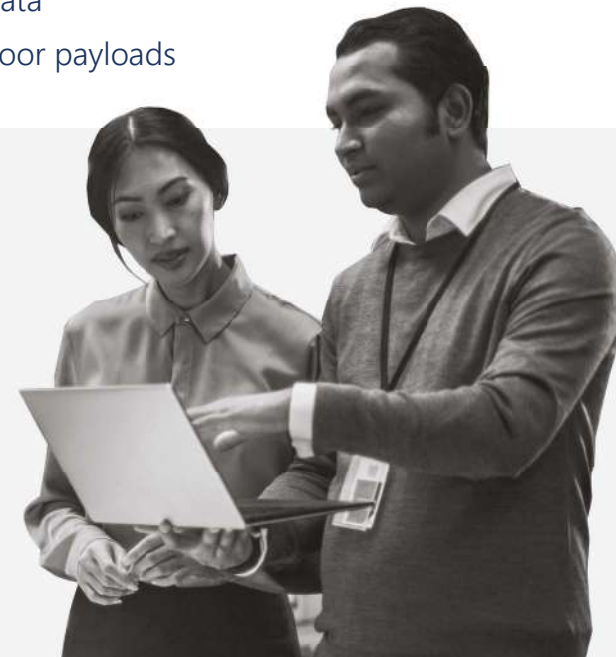
- Limited charging network
- Uptake
- Lack of expertise in cost-effective design
- Poor data coordination

Fleets

- Economic disincentives
- Costly maintenance
- Investment needed in better data
- Poor payloads

Economic and policy challenges

- Motivational policies for tech adoption
- Financial/ownership models for affordable solutions
- Lack of innovator-decisionmaker dialogue
- Drastic grid transformation needed to increase renewables capacity and support rising electricity demand



Harnessing high-potential innovation

From rising star startups, to experienced SMEs with UK-proven products and technologies, ITES provides unrivalled access to the highest-potential innovators – each one addressing critical challenges for India and the UK.

ITES innovators have been chosen for their potential to support UK-India leadership in renewable energy, EVs, and hydrogen, support new products and services in key sectors, and unlock the smart infrastructure necessary for future energy resilience and demand. These creators, makers, and engineers are working on innovative technologies and services across green hydrogen, rail, and fleet solutions, battery storage and management technologies, through to data, flexibility, and network services.

Meet our innovators:
Scan to learn more about ITES SMEs and their technologies



Alternative fuels



Emissions reduction technology



Energy and flexibility management systems



Energy storage and delivery



Batteries and battery management systems



Renewable generation and microgrids



ZEV fleet management



Charging systems



Hydrogen systems



Fast-tracking transformative tech

World-first pilots, R&D and collaborations

By accelerating cutting-edge clean technologies from concept to commercialisation, ITES pilots help UK and Indian businesses capture high-value opportunities in the international supply chain.

Current projects are exploring safer energy storage and cheaper sustainable batteries, enabling faster, more flexible EV charging, improving the reliability of clean energy supply, and much more.



Scan here to learn more about ITES pilots and technologies:

LiNa Energy



Demonstrating a breakthrough battery storage solution with Tata Power

SME:

LiNa Energy

Indian partner:

Tata Power

Location:

Mumbai and Delhi

UK innovator LiNa Energy has collaborated with Tata Power to successfully demonstrate the real-world potential of its novel Sodium Battery Energy Storage System (BESS). The solution unlocks breakthrough performance and unmatched safety at a fraction of the cost of lithium-ion for stationary storage, with the potential to support India's wider intermittency challenges.



Exploring the future of light EV charging with Entrust's smart microgrid systems

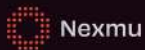
SME:

Entrust Microgrid

Location:

Huddersfield, UK

This R&D project explores how Entrust Microgrid's patented smart DC microgrid and EV charging technologies can be adapted to optimise charging systems in India for light electric vehicle charging, including for 2-wheelers.



Maximising India's vehicle and battery performance with Nexmu's Battery Management System

SME: **Nexmu**
Indian partner: **buymyEV**
Location: **Bengaluru**

The pilot aims to optimise Nexmu's Battery Management System (BMS) for 2, 3, and low-powered 4-wheeler vehicles in India. In providing detailed metrics for intelligent battery usage, the system offers more reliability and versatility for battery-operated powertrains in urban mobility systems.



Revolutionising off-road supply with PowerUp Off-Grid's clean EaaS solutions

SME: **PowerUp Off-Grid Services**
Indian partners: **ConnectM and Motovolt**
Location: **Bengaluru**

PowerUp Off-Grid Services pioneers clean EaaS solutions through renewable PowerStations with swappable batteries. Its pilot tests their commercial potential, using AI to predict battery usage, enable just-in-time swaps, and improve performance reporting, ensuring a reliable, efficient, clean energy supply for India's off-road demands.



We're harnessing the UK and India's rich reputation for R&D and the strength of our business sectors to pioneer testbeds that will unlock better data to support clearer decision-making and bolder collective action from industry and leaders in the transport and energy sector.

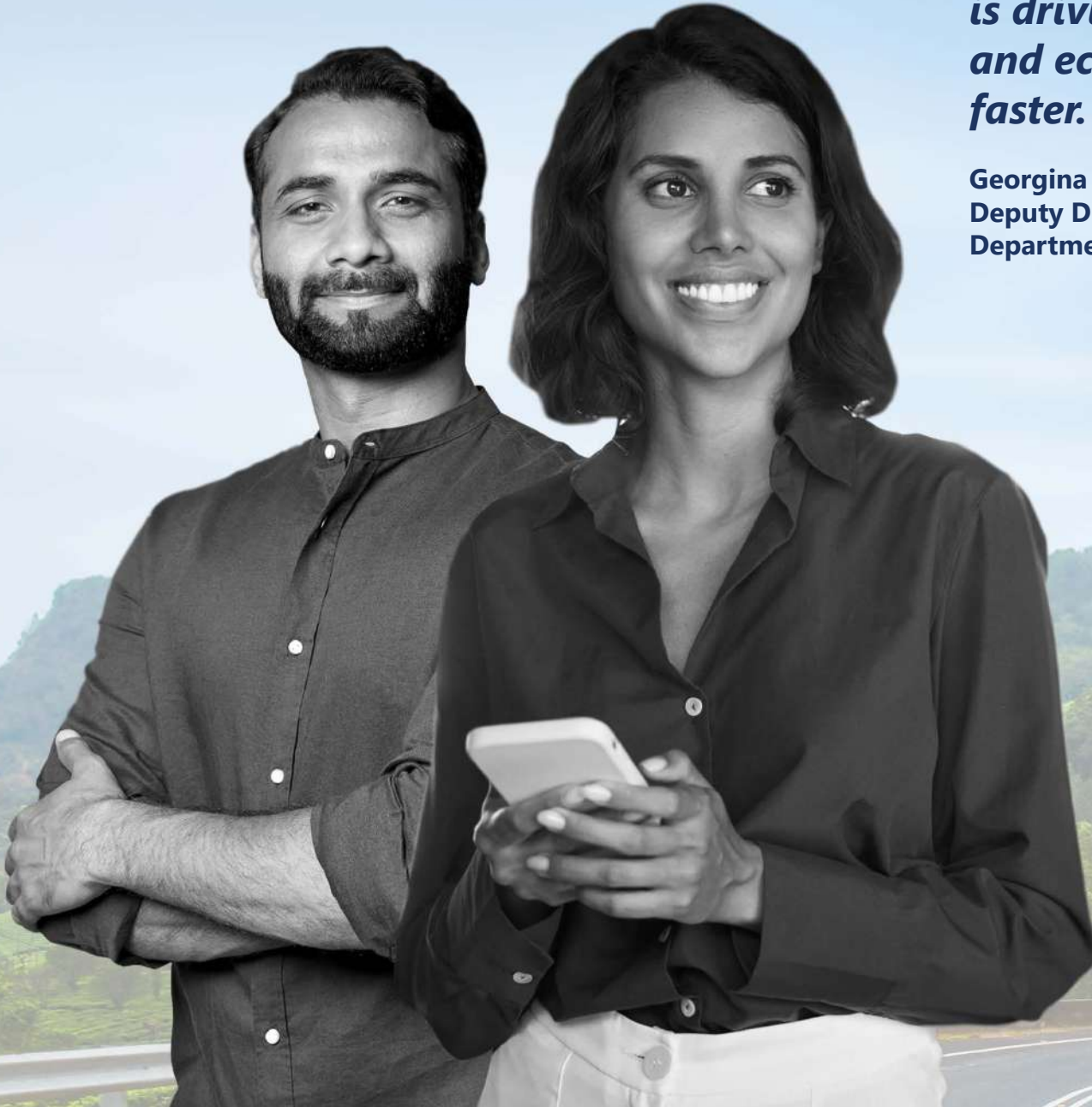
Professor Ashish Verma
Indian Institute of Science, Sustainable Transport Lab





It is an incredibly dynamic time for UK-India science and innovation – ITES is driving the environmental, social, and economic advantages further and faster.

**Georgina Ayre,
Deputy Director for Global Research and Innovation
Department for Science, Innovation and Technology**



Just launched



Enabling India's smart city infrastructure

SME:
Sherwood Power

Type:
R&D

Sherwood Power is working with Indian partners to optimise energy generation and grid development. The collaboration explores the use of energy-recharging smart poles placed in leisure development parks across India to prevent overproduction or shortages, and cut the costs tied to grid expansion.

Just launched



Boosting residential energy efficiency

SME:
Flock Energy

Type:
Pilot

Flock Energy supports India's clean energy transition by using smart meter data and machine learning. Partnering with DISCOMs, the pilot will provide Home Energy Reports to generate better consumption insights for households, peer comparisons, and bespoke cost-saving recommendations.

Helping leaders de-risk and drive innovation

ITES pilots and collaboration projects offer sponsors, investors, and partners a place at the forefront of the transition. As part of top-down whole system analysis and bottom-up innovation demonstrators, UK and Indian organisations are being equipped to:

- **Future proof business operations**, identifying green, commercially viable pathways and models.
- **Isolate investment and development opportunities** through deep, whole system-level insights.
- **Fast-track market readiness of cutting-edge technologies** through real-world demonstrators that evaluate and evidence business cases and viability.
- **Access UK-India innovation, industry, and policy-making muscle** across the transport and energy sectors.

Get in touch to see how ITES experts can help you: info@ites.org

Unlocking catalysts to clean growth

To thrive in a low-carbon future, it's not enough to innovate. ITES brings together stakeholders across sectors and international borders to create the conditions that allow UK-India solutions to flourish.

We're leading initiatives in knowledge and tech transfer, driving commercial partnerships, and addressing systemic barriers to ensure ideas become action, products scale globally, and innovation capital can flow.



Scan here to sign up for market research and webinars.



Driving knowledge transfer between science 'superpowers'

The ITES Knowledge Series, in partnership with FICCI, ensures sector leaders in the UK and India benefit from rich collective insights in clean energy and transport, and can tackle shared challenges. New market research and tools developed by ITES and partners also support policymakers, innovators and industries in both countries to navigate opportunities in key markets, including green hydrogen, EV infrastructure, and the future grid.



Connecting innovators, corporate partners and commercial opportunities

Powering 84 business introductions alone last year, and partnerships with PTC India, Xynteo, Social Alpha, and the UK-Indian Green Hydrogen Hub, ITES is linking innovators, industries and governments on market priorities, funding, and multimillion-pound commercial discussions.



Scaling solutions and stimulating climate finance

Through partnerships with key export stakeholders – such as Freeport East – ITES aims to further boost investibility and international technology transfer. As the voice of innovation at global fora, ITES also supports investors and policymakers to better understand the barriers, advocating for supportive regulation and innovative finance models to help scale Net Zero solutions.

Our impact in numbers:



52

(total) SMEs supported



21

critical innovation areas covered



5

international MOUs



8

cutting-edge pilots



£778k

direct innovator support delivered



111

business introductions enabled



440+

stakeholders engaged



117

sector tools, research and masterclasses delivered



£multi-million

confidential SME-industry commercial discussions enabled

For more information, please contact us:

**Innovating for Transport and Energy Systems
(ITES)**



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