

UK-TÜRKIYE Advanced Manufacturing Global Expert Mission

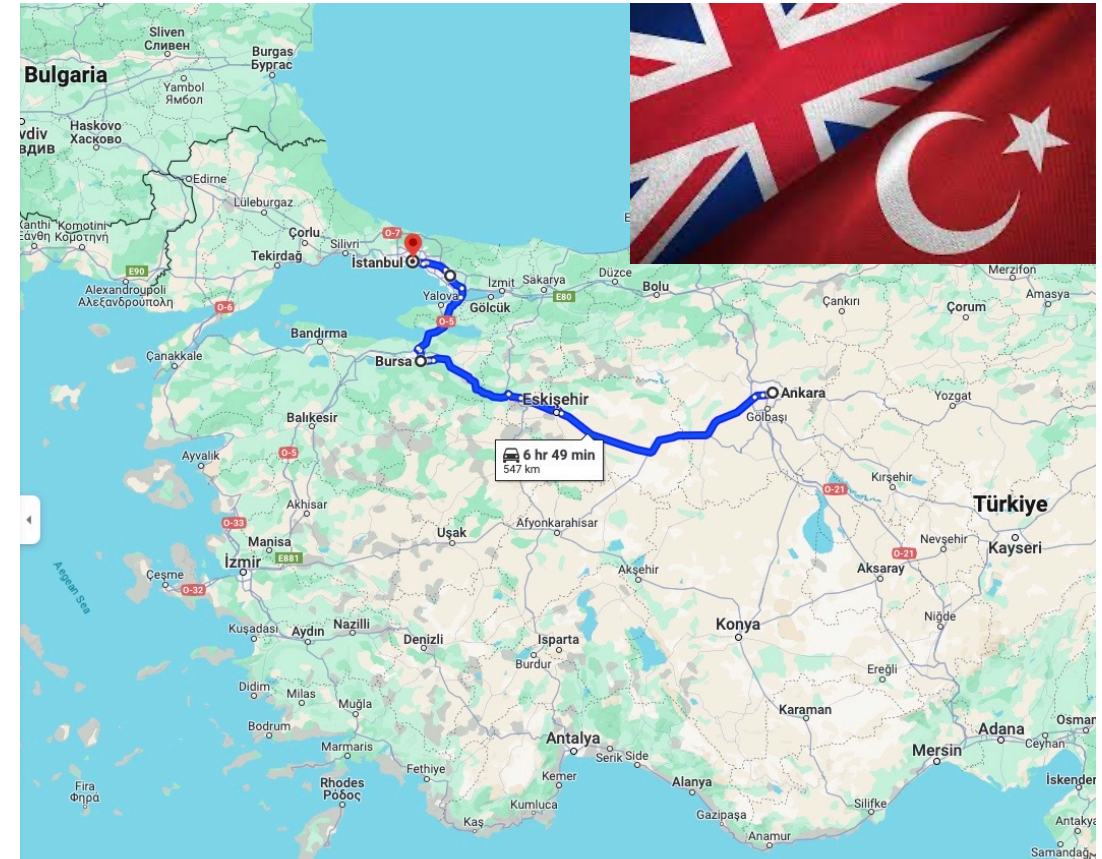
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Türkiye Global Expert Mission

Türkiye's sizeable population, dynamics, and advantageous geographic position as a bridge between Europe and Asia, have made the country an important manufacturing and distribution hub.

Date: 5th to 9th December 2022



Our Delegation

- BAE System Plc
- Baro Vehicles Limited
- High Value Manufacturing catapult (HMVC)
- Productive machines
- Rolls-Royce plc



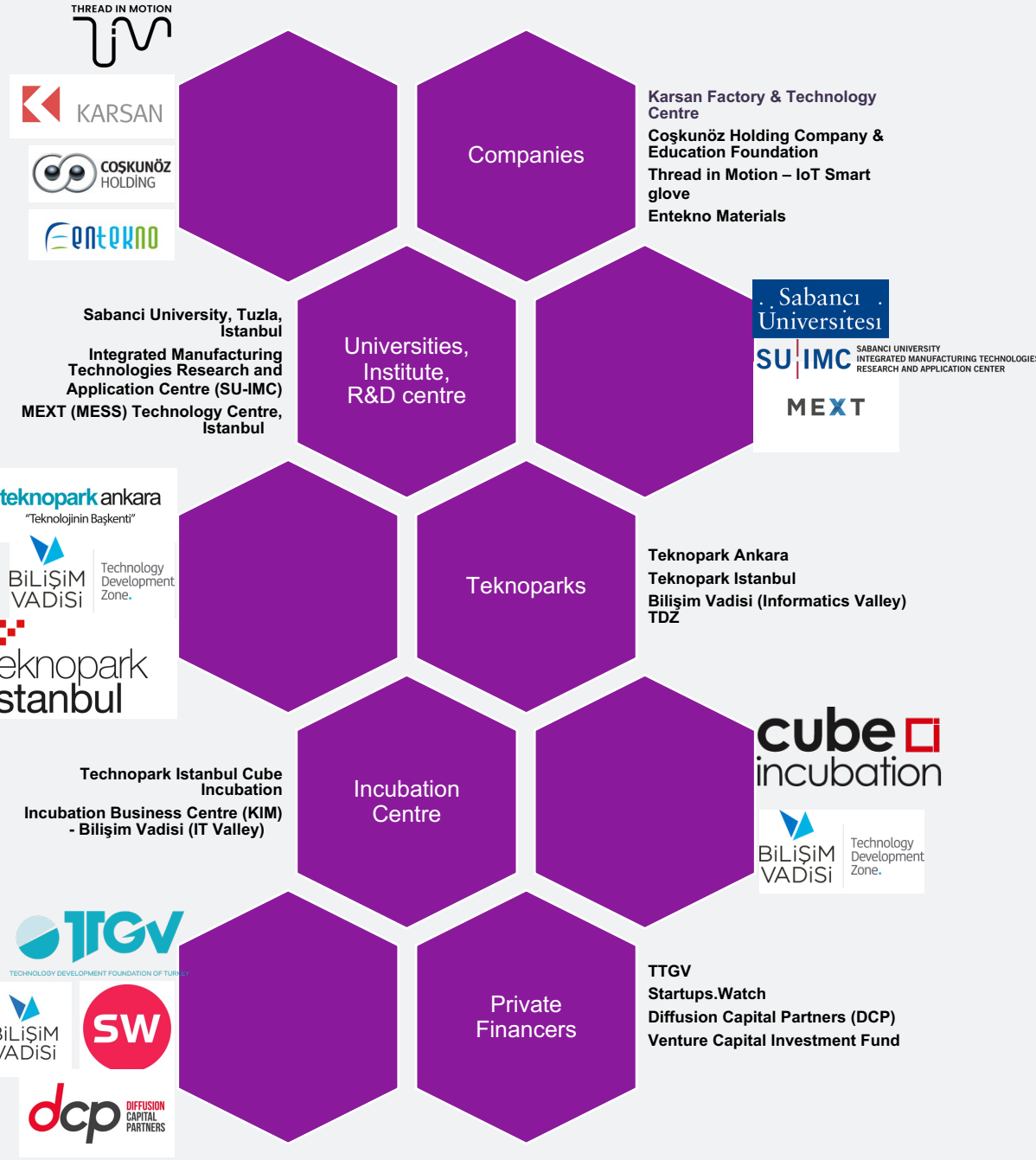
The Scientific and Technological Research Council Türkiye : TÜBİTAK



- **TÜBİTAK** is the leading organisation for the **management and funding of research in Türkiye**.
- It is also the **principal advisory agency to the Turkish Government** on national science, technology, and innovation activities internationally regarding bilateral and multilateral scientific and technological cooperation and research coordination.
- The organisation has ongoing bilateral associations with **92 institutions from 65 countries**.
- TÜBİTAK annually launches **calls for proposals** for academia, industry, and other sectors, also providing **national coordination of EU Framework Programmes** and is involved with both **Horizon Europe and Eureka New Product Development** programmes.



The Stakeholders



Key Opportunities for Collaboration



Opportunity in the development and low-cost production of new nano- based and advanced materials.

Reinforces thermoplastic composites, lightweight metallic and composite materials to **enhance material performance, reduce weight, improve fuel efficiency in vehicles,** and expand applications in aerospace, automotive, and other industries

Ceramics for engines and electronics to **increase engine efficiency,** improve electronic devices, and expand market opportunities for ceramics.

Functional polymers and new technologies using nanomaterials for the development of **innovative products with improved material properties.**

Lower cost metal and polymer additive manufacturing to **reduced production costs, faster prototyping, improved product customisation, and expanded adoption** of additive manufacturing technologies in various industries.

Advanced environmental/sustainable materials to **reduce environmental impact, enhance circular economy practices,** and increase market competitiveness in industries that prioritise sustainability.

Supporting Türkiye transition to sustainability manufacturing

Turkish Manufacturers are becoming aware of the upcoming requirements and significant opportunities recycling and re-use represent. With the launch of sustainability programmes by TÜBİTAK and TTGV, there is an opportunity to collaborate with UK organisations to accelerate the development of sustainable materials and move towards a circular economy.

The UK has existing EOL/ recycling policies and legislation which has helped to establish an effective national infrastructure for waste collection and material recovery and reuse.

UK HVMC support and industry/academic organisation collaborations to accelerate the development of more sustainable material solutions could be very beneficial to all industry sectors in Turkey by gaining access, via collaborations, to the respective sustainability expertise and best practices available in the UK.

Supporting the scaling-up of new advanced technologies

The collaboration between Turkish organisations and the UK could bring about a positive impact on the global community.

Advanced technologies can be scaled up, and new materials, digitisation, and clean energies can be rapidly delivered.

This partnership can pave the way for improved productivity and competitiveness, as well as net-zero solutions that benefit everyone.

The UK R&D universities, HVM Catapult, and leading UK companies doing R&I have facilities, knowledge and expertise that could be of benefit to help companies in Türkiye needing to undertake proof of concepts, pilot projects and feasibility studies.

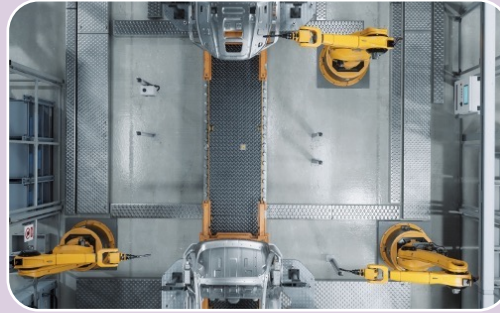
Key Challenges to Collaboration Opportunities



Turkish companies and organisations are increasingly recognising the need for more sustainability.



Identifying and securing long-term investment partners is a real challenge as it implies a very low return on investment.



Finding the right project partners for collaboration is a major challenge for SMEs and smaller start-ups in Türkiye.

