Scientific and Technological Research Council of Turkey (TÜBİTAK)

- **R&D infrastructure support in scientific and technological areas**

Establishment: 1963

1. Funding R&D and Innovation
2. STI Human Resources Development
3. Science and Society Activities
4. Performing R&D
5. International ST&I Cooperation

The **flagship institution** of science, technology and innovation celebrated the 58th anniversary on **July 24, 2021**

- **Establish research centers and institutes in strategic areas to strengthen the technological infrastructure of the country**
- **Work in coordination with the Presidential Policy Boards on scientific and technological R&D activities**

23 INSTITUTES

~4.600 RESEARCH PERSONNEL

Horizon Europe Program

Çağrı YILDIRIM
National Coordinator of Horizon Europe Programme in Turkey

Horizon Europe Program

Approaches in which the difficulties that require solutions are at the center are followed together

Qualified Knowledge
Qualified People

Challenges Requiring Solutions

Co-Creation

CLUSTER 5: Climate, Energy and Mobility– Destinations

1- Climate Science

Climate Science

2-Cross Cutting Solutions

1. Batteries
2. Cities
3. Breakthrough technologies
4. Citizen and stakeholder engagement

3-Energy Supply

1. Renewable energy
2. Energy system, grids and storage
3. CCUS
4. Cross cutting activities

4- Energy Demand

1. Buildings
2. Industry

5- Clean and competitive solutions for all transport modes

1. Zero Emission Road Transport
2. Aviation
3. Waterborne transport
4. Transport related health and environmental issues

6-Transport and Smart Mobility Services

1. CCAM
2. Multimodal and sustainable transport systems for passangers and goods
3. Safety and Resilience

Görseller www.flaticon.com sitesinden alınmıştır.

Cluster 5: Climate, Energy and Mobility

- aims to fight climate change by better understanding its causes, evolution, risks, impacts and opportunities, and by making the energy and transport sectors climate neutral, environment- friendly, efficient, competitive, smarter, safer, resilient and useful for citizens and society.

- Cluster 5 supports the EU's strategic objectives through activities included in its work programme and through the support of Institutional European Partnerships which are implemented through dedicated structures.

- R&I activities under CL5 will contribute to the objectives of the European Green Deal related to then **Climate Pact**, the **Clean energy strategy**, the **Strategic Energy Technology (SET) Plan**, the **Strategic Transport Research and Innovation Agenda** (STRIA), **European Circular Economy Action Plan**

Intervention Areas
Climate sciences and solutions
Energy systems and grids
Energy supply
Builddings and industrial facilities in energy transitions
Energy storage
Communities and cities
Smart mobility
Clean, safe and accessible transport and mobility



Cluster 5 WP 23-24 – policy priorities

- Contribute to **EU Policy Objectives**
- Maximite the impact and uptake of activities
- Push **mission** forward
- Strengthen the **social dimension**
- Foster **synergies**

Cluster 5 WP 23-24 – main EU policies

European Grean Deal	• Great majority of topics contribute to Green Deal objectives and initiatives in energy and transport/mobility
Developing an economy that works for people	• Many topics address industrial competitiveness, training and skills
Europe fit for the digital age	• Many topics include explicit references to IT- (and data-) driven solutions
Stronger Europe in the World	• 18 topics (204 M€) target international cooperation • 3 topics (40 M€) on Partnership with Africa
New push for European democracy	• Mainstreaming of SSH across Destinations (77 topics; 824 M€) • Many topics call for inclusion of citizens

Circularity (44 Topics, 598 M€)

Biodiversity (19 topics, 87 M€)

Offshore renewable energy strategy (15 topics, 261 M€)

Forthcoming strategy on solar energy (15 topics, 157 M€)

61 topics (707M€) implementing **industry-led Partnerships**

Standardisation (27 topics; 312 M€)

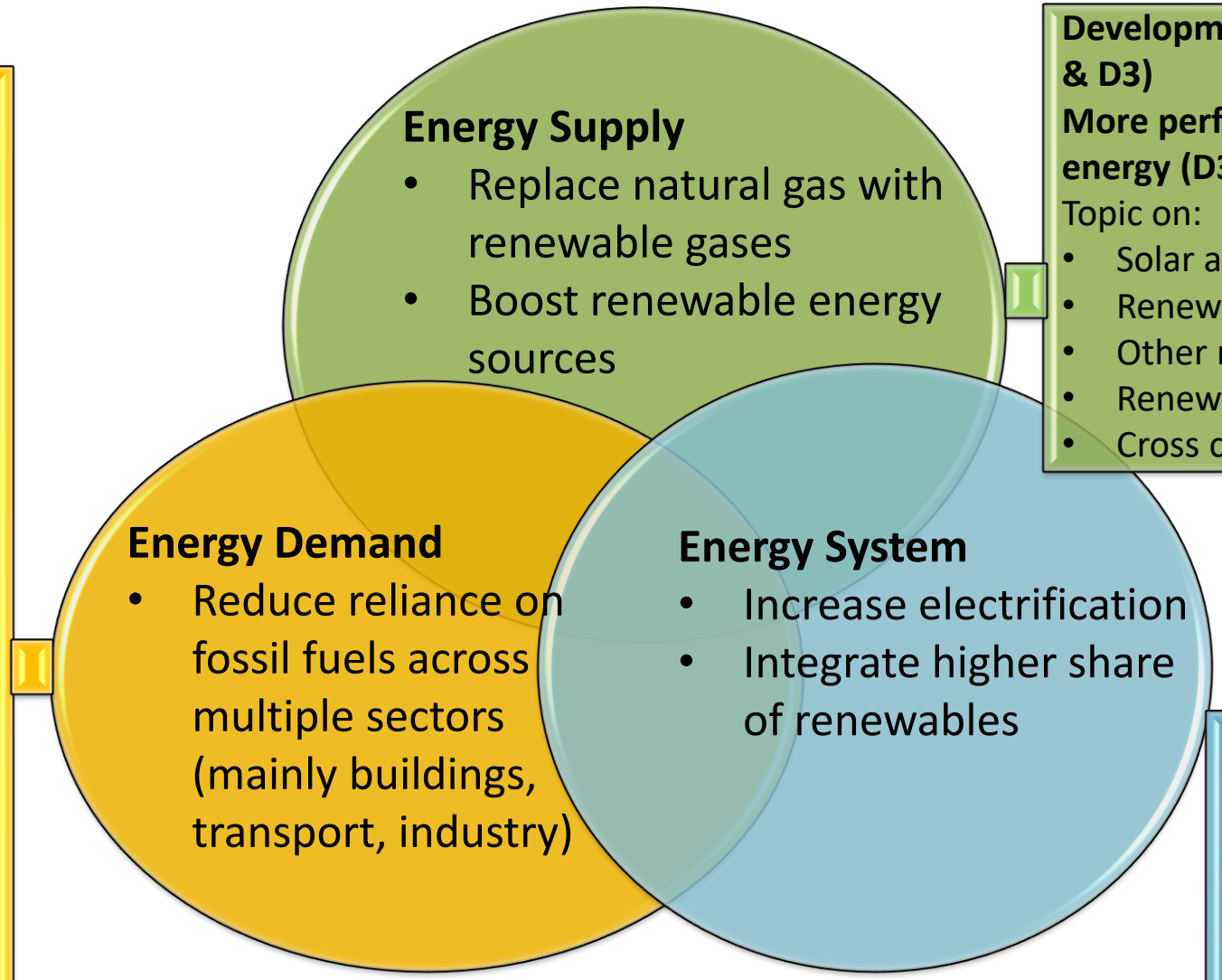
82 topics (1009M€) targeting **ICT- and data-driven solutions**

Cluster 5 WP 23-24 – REpowerEU Priorities

Buildings (D4)
- Topics on energy efficient and Clean energy buildings

Industry (D4)
- Topics on energy savings in industry

Transport (D5 & 6)
Topics on:
- Electric vehicle deployment
- More performant batteries for electric vehicle
- Hydrogen/electric aviation
- Alternative fuels/electric powertrains for waterbone transport
- More efficient logistic



Development of Hydrogen solutions (D2 & D3)
More performant/cheaper renewable energy (D3)
Topic on:
- Solar and wind energy
- Renewable fuels
- Other renewable fuels
- Renewable energy valleys
- Cross cutting activities

Energy Systems Grid and Storage (D3)
- Topics supporting the flexibility and resilience of the energy system

Batteries (D2 and 5)
- Topics on batteries for stationary energy storage

- Main expected impacts:
- Innovative data-driven services for consumers that empower them to engage in the energy transition. Enhanced consumer satisfaction and increased system flexibility thanks to enabling consumers to benefit from new energy services and facilitating their investment and engagement in the energy transition.
- Foster the European market for new energy services and business models as well as tested standardised and open interfaces of energy devices through a higher degree of interoperability, increased data availability and easier data exchange.
- Development of **cyber-security and privacy tools** and technologies tailor-made for the specific requirements of the energy system.