Outputs

Energetic School Retrofitting
- Finalisation of all design related drawings and tender documents for construction in May 2018
- Consultancy for supervising and quality assurance during the construction process in summer 2018
- Post-retrofit data collection, monitoring and evaluation processes of the school retrofit
- Training of energy managers
- An exhibition and training centre for students in the pilot school

Guideline for School Retrofitting
- Determining the aims, method, and content for the development of a technical guideline outlining the procedures, potential measures and criteria for energetic retrofits of similar school buildings across Turkey
- Building stock overview for this school type and identification of potential impact size of the guideline
- Preparation of the guideline using the results from the model school retrofit and other relevant experiences and information

Revision of New School Plans for Energy Efficiency
- Identification of school building plan types with the highest volume of new constructions in Turkey by the Ministry of National Education and first workshop
- Development of a methodology and approach for the revision of the plans and drawings
- Analysis and energy modelling of original school plans by a team of Turkish and German experts
- Alternative revisions specifying energy efficiency improvements of different ambition levels and costs for each climate zone

Next steps

Energy Analysis for the Ministry of Environment and Urbanisation’s Service Building
- Study visits to Germany with Ministry staff:
  - Late 2014: Trip to Frankfurt to see how municipalities instigate energy efficiency in public buildings
  - May 2017: Trip to Ludwig Börne School (Frankfurt) and the GIZ office building (DGNB certified) for illustrative purposes of energy efficiency renovation measures
  - February 2018: Trip to Frankfurt and Bonn to inspect several service buildings of high energy efficiency standards, including the European Central Bank
- Energy audit of the Ministry of Environment and Urbanisation’s service building in Ankara by a team of German and Turkish auditors
- Assessment of the current condition of the building and identification of optimal measures for energy efficiency improvements
- Selection of prioritised measures and detailed planning to apply them in the service building
- Creating a guideline on retrofitting public buildings and a checklist for best practice examples of energy efficiency measures for new buildings still being planned or constructed

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Energy Efficiency in Public Buildings

Outputs

Next steps

Project for Energy Efficiency in Public Buildings in Turkey

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The project focuses on the public building sector in Turkey and aims to enhance energy efficiency in these buildings. The main objectives are:

1. To support the development of energy efficiency regulations and standards.
2. To promote the adoption of energy-efficient technologies and practices.
3. To train and educate professionals in the field of energy efficiency.

The project includes the following key activities:

- **Training of Trainers on the Latest Buildings Energy Performance Software (BEP-TR)**
  - Development of a training concept for the latest version of BEP-TR.
  - Further trainings on increasing the auditing capacity within the Ministry’s professional environments.

- ** Nearly Zero Energy Buildings Concept for Turkey**

- **Heat Pump Systems**
  - Preliminary work for a study on Application/Adaptation of Heat Pump technology for public and private buildings in Turkey.
  - Elaboration of the study with technical specifications to be fed into an online tool.

- **Supporting the data and information base for decisions on energy efficiency actions in public buildings**
  - Preliminary study and follow-up meeting among Ministries and other stakeholders to showcase various data management approaches, and to make an initial assessment of the model type most suited to Turkey’s requirements.
  - Study visit in May 2017 to Frankfurt Municipality’s Department for Energy Management.

- **Energy Efficiency Technology Atlas for the Turkish Buildings Sector**
  - Final consultation meeting at ENPIF Fair in Istanbul in January 2018.
  - Publication of the Energy Efficiency Technology Atlas and a roadmap to successful implementation.

- **Technology Cooperation**
  - Identification of possible cooperation areas between Fraunhofer – TSE and IDDIER through further workshops/meetings to facilitate possible formalized cooperation.

- **Private Sector Collaboration with Turkish German Chamber of Commerce and Industry (AHK)**
  - Pillar 2: Business to business (B2B) event in Istanbul during ENPIF Fair in January 2018 with the participation of German companies from the energy efficiency in buildings sector.
  - Pillar 3: Follow-up activities for market support with selected private sector stakeholders to promote energy efficient technologies in Turkey.

- **Academic Cooperation**
  - Extending the summer school programme between Beuth University and Middle East Technical University for a jointly organised summer school on energy efficiency in buildings and design for a full Master Programme.

- **Mobile Demonstration of Energy Efficiency and Renewable Energy Technologies**
  - Feasibility study for a mobile demonstration unit to create awareness and inform the general public.
  - Construction of a building model to showcase energy efficiency and renewable energy technologies.

The project is implemented by the Vocational Services of MoEU GmbH and the Directorate General of Internationale Zusammenarbeit (GIZ) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Germany, with the support of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and the German Climate Technology Initiative (DKTI) Programme for Energy Efficiency in Public Buildings in Turkey. The project is expected to contribute significantly to Turkey’s efforts in improving energy efficiency in public buildings and enhancing the country’s energy efficiency standards and practices.