

SHURA's next study

"Increasing cost-effectiveness of retail tariffs through energy transition"

SHURA Energy Transition Center

1. Background

Currently Turkey has a regulated tariff structure, which rests on two main components: Energy Sourcing (Retail) and Network (Distribution & Transmission). Energy sourcing is the main component of the regulated retail tariffs, for different electricity consumer types, tariffs are defined through revenue ceiling method (for energy sourcing, also price cap). There are also tax and levies as a pass through item. It is recently announced that this **regulated tariff structure will be transformed in a way that it will encompass a separated retail tariff for consumption of electricity generated from renewable energy resources. Although it can be presumed that this transformation is only an important "way station" on the path to a long-term transformation of the retail tariff structure such that it becomes perfectly cost-competitive, thus able to reflect the real market prices with the need for being "regulated" disappearing, it is yet not clear where this announced transformation "way station" stands, and how it can be supported and strengthened.**

2. Objective, policy goals and tasks

The aim of this study is to answer the following question: **How to transition from regulated tariffs to competitive retail pricing facilitating the energy transition? The study will assess the gap between the current tariff structure and the long-term goal for its reform and outline the necessary steps to be taken to fill this gap, with the assumption of a long-term target of perfect cost-reflectiveness of the retail tariff, and with four main policy links in terms of three main pillars of energy transition: variable renewable energy capacity development (utility scale and distributed generation), energy efficiency (demand response), electrification (i.e. electric vehicles).**

When the transformation of the electricity market to perfect competition is finalized, the need for a regulated retail tariff structure also disappears. As the tariff structure becomes more and more cost-reflective, in the long-term, the tariff structure itself disappear, except for the households and the consumers who do not use their rights to choose their suppliers.

The current links about the above-mentioned energy transition policies are:

- It is recently announced that a **new tariff system** is currently being **planned for consumption of solar and wind**. This is expected to provide a base for **corporate power purchase agreements** and thus support the **deployment of utility scale renewable energy**.
- There is a need to **transform retail tariff rates for distributed energy**. This is carried out through monthly net-metering policy mechanism that is in operation since April 2019.
- **Energy efficiency**, demand response and time of use tariffs are regarded as important policy links for increasing cost-competitiveness of the retail tariffs.
- It is currently assessed by a SHURA study that a **policy link is needed regarding electric vehicles** and that a **retail tariff is to be needed for smart battery chargers**.

These underlying targets and policy links and aims in mind, the project is planned to be carried out through the following tasks:

Task 1: Pre-study Stakeholder Engagement

Prior to the research engagement with stakeholders such as TMMOB, EPIAŞ, TEİAŞ will be carried out to understand the current retail tariff structure and the targets for its transformation. This is needed in order to understand the path of transformation and assess the opportunities to support this transformation.

Task 2: Assess and map the current retail tariff structure

This task will provide an assessment of the current retail tariff structure and assess relevant policy issues related to the current retail tariff structure in terms of variable renewable energy capacity development (utility scale and distributed generation), energy efficiency (demand response), electrification (i.e. electric vehicles).

Task 3: Research, assess and map the planned transformation target of Turkey's retail tariff structure and its policy goals

This task will develop a clear understanding of the planned modification of the retail tariff structure in the short to medium term with the assumption that in the long-term there will be a competitive market meaning no retail tariff structure. It will also include an assessment of the important policy issues and goals related to the planned reform of the retail tariff structure. The discussion on the transformation target for retail tariffs is ongoing with more clarity expected later in the year.

Task 4: Development of policy recommendations

This task will provide a set of policy recommendations to overcome the current gap between the existing retail tariff structure and the planned reform.

Task 5: Assessment of the impact of reformed tariffs on specific areas of the energy transition

This task will describe the impact a reformed retail tariff will have on three areas including distributed generation, energy efficiency and demand response, and electrification. This analysis will be qualitative in nature.

Task 6: Prepare technical and policy maker friendly reports

Upon completion of the research we will produce a final technical report which can form the basis of policy briefs that explain a possible roadmap and strategy to support the transformation of Turkey's

regulated retail tariff structure and policy suggestions that enhance Turkey's energy market transformation.

Deliverables	Responsible	Timeline
Project starts (process related to contracting the consultant starts)		January/February 2021
Task 1: Carry out Pre-study Stakeholder Engagement	SHURA + Consultant	January 2021
Task 2 and 3: Assess and map the current situation of the Turkey's current retail tariff structure and assess its policy links. Research, assess and map the planned transformation target of Turkey's retail tariff structure, its policy links and policy goals	SHURA + Consultant SHURA + Consultant	January 2021
Task 4: Development of policy recommendations	RAP + Consultant	February 2021
Task 5: Assessment of the impact of reformed tariffs on specific areas of the energy transition	RAP + Consultant	February 2021
Review of Task 4 & 5: Through involvements of selected stakeholders from the private and public sectors	SHURA + Consultant	February 2021
Tasks 6: Final version of the report, detailed and well-structured of the analysis, along with a slide deck and a set of infographics with their content to be agreed with the SHURA team	SHURA + RAP + Consultant	March 2021

4. Key research questions

- a) What does the current regulated retail tariff structure look like?
- b) What are the short to medium term targets to transform the current regulates retail tariff structure and what are this targets policy links in terms of
 - i. variable renewable energy capacity development (utility scale),
 - ii. variable renewable energy capacity development (distributed generation),
 - iii. energy efficiency (demand response),
 - iv. electrification (electric vehicles).
- c) What does this target and its policy links mean for Turkey and Turkey's energy transition?
- d) How is the transformation from current state of regulated retail tariff and this target can be supported with the policy links to energy transition?

5. Key messages:

- a) More competitive power market design can provide more cost-reflective retail tariffs.
- b) Transformation of regulated retail tariffs towards higher competition can result in decrease in the need for regulation of retail tariffs and increase in their cost-reflectiveness.
- c) Transformation of regulated retail tariffs can be enhanced through energy transition, particularly through variable renewable energy capacity development (utility scale and distributed generation), energy efficiency (demand response), electrification (i.e. electric vehicles).
- d) Energy transition help increase the cost-effectiveness of retail tariffs.

6. Note:

In order for the documents to be taken into consideration, the technical proposal must be submitted to the tender commission together with the other documents until the date specified in the advertisement.

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