



Project of Technical Assistance
to KOSGEB to increase EE in SMEs in TURKEY



STRATEGIES OF TURKEY

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The name of the strategy	Time period	Aim of the strategy
Tenth Five Year Development Plan	2014-2018	This economic roadmap forecasts a 5.5 percent annual growth rate in the economy, increase in annual exports to \$277 billion, an increase in Turkey's per capita income to \$16,000, reducing unemployment to 7.2%, as well as lowering inflation to 4.5 %.
Medium term programme	2014-2016	<p>The Programme includes measures for both energy efficiency and SMEs.</p> <p>Energy efficiency is highlighted as one of the measures to reduce production cost in industry. Also to decrease energy intensity of the economy, current energy efficiency studies and activities will be continued.</p>
National Climate Change Strategy	2010-2020	To contribute the combat with climate change in accordance with the sustainable development policies within the frame of common but differentiated responsibilities principle and national circumstances.

The name of the strategy	Time period	Aim of the strategy
Climate Change Action Plan	2011-2023	To limit greenhouse gas emission in the combat with climate change, to adapt to climate change and minimize the effects of climate change.
Turkish Industrial Strategy Document	2011-2014	To increase the competitiveness of the industry and accelerate the transformation into an industrial structure which takes more share from world exports, in which high value added and high technology goods are produced and which has more qualified labor and at the same time is more sensitive about the environment and society.
Electricity Energy Market and Supply Security Strategy Paper	2010-2023	To increase renewable and indigenous resources shares in electricity production

The name of the strategy	Time period	Aim of the strategy
Energy Efficiency Strategy	2012-2023	To reduce the energy intensity of the economy with energy efficiency and thus strengthening supply security in energy, to reduce the risks of import dependency, to minimize costs, to combat climate change and to protect the environment.
SME Strategy and Action Plan	2011-2013	To enhance the production level, amount of investment, value added and growth of SMEs.
KOSGEB STRATEGIC PLAN	2011-2015	Define Vision, Mission and Strategic Purposes and Targets of KOSGEB

Tenth Five Year Development Plan (2014-2018)

The Tenth Development Plan is organised under four main headings:

1. Qualified People- Strong Communities,
2. Innovative Manufacturing-Stable High Growth
3. Livable Spaces, Sustainable Environment
4. International cooperation for development

Energy efficiency target of reducing energy intensity by at least 20% during the period 2012-2023. This means reducing energy intensity :

2012: 0.2646 Toe/1000 US \$

2018: 0,243 Toe/1000 US \$ >>>>> 2,4%

This value is net of climatic distortions, and is based on prices at USD 2000.

The 10th Development Plan includes *Programme* :

Energy Efficiency :

Component 3 : Improving mechanisms for supporting SMEs on energy efficiency training, studies and consultancy services that fully supports KOSGEB efforts and assigns the KOSGEB as responsible organization.

Medium Term Programme (2014-2016)

Energy efficiency is highlighted as one of the measures to reduce production cost in industry. Also to decrease energy intensity of the economy, current energy efficiency studies and activities will be continued.

- Natural resources should be used efficiently.
- Waste will be recovered to contribute to the economy.
- Support will be provided for environmentally friendly approaches that constitute new business opportunities and income sources, as well as opportunities for development of new products and technologies.
- According to the Medium Term Programme there is a strong need for strengthening of SMEs on issues such as:
 - adaptation to the strong competition arising from globalisation; sufficient capitalisation, innovation, business and project development partners.
 - to meet these requirements, SMEs will be supported through SME support schemes on entrepreneurship and innovation, to increase productivity and employment growth
 - by developing new initiatives such as venture capital, individual participation capital, credit guarantee funds, micro-credit and capital market opportunities and SMEs access to finance will be facilitated.

NATIONAL CLIMATE CHANGE STRATEGY (2010-2020)

National Climate Change Strategy (2010-2020), developed and approved under the coordination of the Ministry of Environment and Urbanization, identifies priority activities to be carried out in sectors for mitigating climate change, as well as urgent measures for adapting to climate change.



Climate Change and Turkey

International Process

Turkey's special circumstances among Annex I countries has been accepted by Parties by decision numbered 26/CP.7 dated 2001 and Turkey's name has been deleted from Annex II of the Convention.

Turkey became a party to the Convention on May 2004.

Turkey became a party to the Kyoto protocol on August 26, 2009

**NO MITIGATION OR
LIMITATION COMMITMENT
IN THE FIRST COMMITMENT
PERIOD**

National Process

CBCC established in 2001.

CBCC re-structured in 2004.

First National GHG Emission Inventory submitted to the Convention Secretariat in 2006.

Initial National Communication of Turkey submitted to the Convention Secretariat in 2007.

National Adaptation Strategy process initiated in 2009.

National Climate Change Strategy Document of Turkey approved on May 3, 2010.

National Climate Change Strategy, 2010-2020



TÜRKİYE CUMHURİYETİ

İKLİM DEĞİŞİKLİĞİ
EYLEM PLANI



National Climate Change Action Plan

ULUSAL İKLİM
DEĞİŞİKLİĞİ
STRATEJİ BELGESİ

TÜRKİYE
CUMHURİYETİ

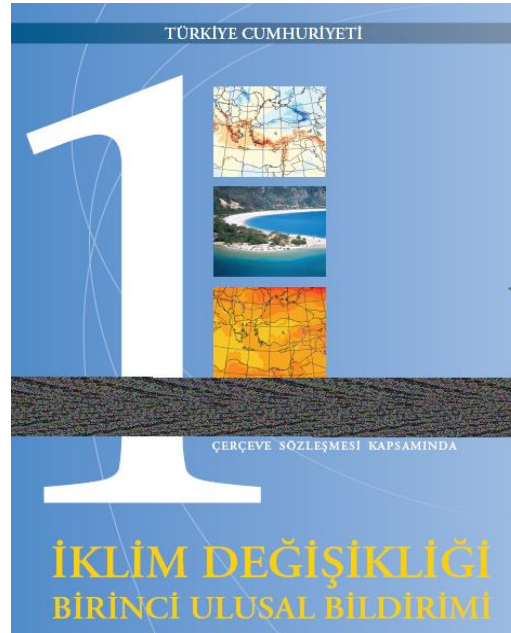
TÜRKİYE ÇÖZÜME ORTAK OLUYOR
Aralık 2009



National Climate Change Strategy, 2010-2020

5th National Communication report
presented to UNFCCC Secretariat in
2013

First National Communication
report presented to UNFCCC
Secretariat in 2007.



NATIONAL CLIMATE CHANGE STRATEGY (2010-2020)



SMEs related strategies:

Use of new and alternative fuels in increasing levels shall be supported together with market incentives and penetration strategies for this purpose:

By 2020, energy intensity shall be decreased with reference to 2004 levels

NATIONAL CLIMATE CHANGE STRATEGY (2010-2020)



SMEs related strategies:

Intensive climate change awareness raising activities will be carried out for industry and consumers.

The process of hiring energy managers in all industrial facilities with annual energy consumption of more than 1,000 TEP shall be finalized and efficient operation of this system shall be ensured

NATIONAL CLIMATE CHANGE STRATEGY (2010-2020)



SMEs related strategies:

Heat recovery options in industry, motor control systems, and industrial cogeneration systems shall be stimulated and encouraged.

Replacement of resources used in industry with cleaner production resources and use of alternative materials will be encouraged.

The determined saving potential shall be realized at maximum levels by the year 2020, through energy efficiency practices in the industry sector.

NATIONAL CLIMATE CHANGE ACTION PLAN (2011-2023)



Main goals and actions related to SMEs;

Reducing primary energy intensity by 10 % compared to 2008 by 2015 as a result of implemented and planned policies and measures

Increasing the amount of incentives for energy efficiency applications by 100 % until 2015

Increasing the share of clean energy in energy production and use

Making legal arrangements for energy efficiency and limitation of greenhouse gas emissions

NATIONAL CLIMATE CHANGE ACTION PLAN (2011-2023)



Main goals and actions related to SMEs;

Limiting GHG emissions originating from energy usage (including electrical energy share) in the industry sector

Decreasing the CO₂ equivalent intensity per GDP produced in the industrial sector until 2023

Designating energy managers in all enterprises above 1,000 toe

Developing and using new technologies for limitation of GHG in the industry sector until 2023

TURKISH INDUSTRIAL STRATEGY DOCUMENT (2011-2014)

The basic goal of Turkish Industrial Strategy document include;

- ❑ Mobilizing the transformation of industrial structure towards, increased competitiveness and efficiency

- ❑ Produces more high-tech and high added value products,

- ❑ Uses highly qualified labor force and is sensitive to environment and society.



TURKISH INDUSTRIAL STRATEGY DOCUMENT (2011-2014)

Turkish industry needs to increase energy efficiency while sustaining high growth rate.

Transformation of industry towards cleaner production will provide resource use efficiency in many sectors.



TURKISH INDUSTRIAL STRATEGY DOCUMENT (2011-2014)

Policies in the Strategy regarding resource use efficiency state that transformation towards low carbon economy and cleaner production will be supported and nationwide eco-efficiency programs will be implemented. Those programs consist of the adaptation measures for the minimization of climate change risks to industry.



Electricity Energy Market and Supply Security Strategy Paper (2010-2023)

Main Principles:

- Creation and maintenance of market structure and market activities in a way to ensure supply security;
- Toward the target of creating a sustainable electricity energy market, taking into consideration climate change and environmental impacts in activities in all areas of the industry;
- Minimizing losses during production, transmission, distribution and utilization of electricity energy; increasing efficiency; reducing electricity energy costs by building a competitive environment based on resource priorities of energy policy; and using such gains to offer more reasonably priced electricity service to consumers;
- Encouraging new technologies, ensuring diversity of resources, and maximum use of domestic and renewable resources in order to reduce external dependency in energy supply;
- Increasing the share of domestic contribution in investments to be made in the sector.

Electricity Energy Market and Supply Security Strategy Paper (2010-2023)

The share of renewable resources in electricity generation is increased up to at least 30% by 2023 :

- Technically and economically available **hydro-electric potential** is entirely put to use in electricity generation.
- **Installed wind energy power** to 20.000 MW by the year 2023.
- 600 MW, which is presently established as suitable for **geothermal electricity** energy production, is entirely commissioned by 2023
- Maximum utilization of country **solar energy** potential for generating electricity

Electricity Energy Market and Supply Security Strategy Paper (2010-2023)

Efficiency And Savings :

Toward the goals of ensuring energy supply security, reducing risks associated with external dependency, increasing the effectiveness of fight against climate change, and protecting the environment, it is important that we increase efficiency from the production to the consumption of energy, that we prevent waste, and reduce energy intensity both on sector basis and at a macro level.

Within the framework of Energy Efficiency Law No. 5627, electricity energy will be used effectively, waste of electricity energy will be prevented, burden of electricity energy costs on economy will be relieved, and environmental impacts will be migrated.

NATIONAL ENERGY EFFICIENCY STRATEGY PAPER (2012-2023)

To reduce the energy intensity of the economy with energy efficiency and thus strengthening supply security in energy, to reduce the risks of import dependency, to minimize costs, to combat climate change and to protect the environment.

The Energy Efficiency Strategy Paper defines a clear plan for coordination between the public sector, the private sector and non-governmental organizations for increasing the effectiveness of the energy efficiency measures. The Strategy includes the following measures pertinent to SMEs.

NATIONAL ENERGY EFFICIENCY STRATEGY PAPER (2012-2023)

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Strategic Purposes of the EE Strategy

SP-01: *To reduce energy intensity and energy losses in industry and services sectors.*

- o Energy intensity in each sector of activity should be reduced, at a rate to be determined by sectoral discussions, but which should be at least 10% over 10 years.
- o Enterprises that are required to establish an energy management unit or nominate an energy manager in the industry and services sectors, as well as the industrial zones if they dealing with public institutions, should have ISO 50001 Energy Management Systems Standard certification.
- o Enterprises, consuming more than 5000 TOE annually or using buildings with an area exceeding twenty thousand m², must prepare energy savings action plans. The investments providing improvement in energy efficiency shall be encouraged.

Strategic Purposes of the EE Strategy

- SP-02: *To decrease energy demand and carbon emissions of the buildings; to promote sustainable environment friendly buildings using renewable energy sources.*
- SP-03: *To provide market transformation of energy efficient products. Energy using devices - lamps, motors, refrigerators, etc. - will have to meet energy efficiency standards.*
- SP-04: *To increase efficiency in production, transmission and distribution of electricity; to decrease energy losses and harmful environment emissions.* Demand side management programs should achieve reduction of energy intensity of 20% by the year 2023.

Strategic Purposes of the EE Strategy

- SP-05: *To reduce unit fossil fuel consumption of motorized vehicles, to increase share of public transportation in highway, sea road and railroad and to prevent unnecessary fuel consumption in urban transportation.* Transport should become less energy intensive and emission intensive. Motor vehicles should become more efficient, and low emission modes of transport - rail, sea, mass transport for passengers - will be encouraged.
- SP-07: *To strengthen institutional structures, capacities and collaboration; to increase use of state of the art technology and awareness activities and to develop financial mechanisms except public.* Public institutions should improve technology, and cooperate more efficiently to reach the goals of energy efficiency

SME Strategy and Action Plan (2011-2013)

SME Strategy and Action Plan (KSEP)" is the basic document that defines the policy of Turkey on SMEs. In the plan, there are 5 strategic fields, 16 targets and 82 activities to be realized by responsible institutions and organizations

Five privileged "Strategic Areas" have been defined in the SME Strategy and Action Plan:

1. Improving and supporting entrepreneurship
2. Improve SMEs Capability and Corporate Management Skills
3. Support SMEs in the process of improving their business and investment environment
4. Improving SMEs' R&D and innovation capacity
5. Facilitating access of SMEs and entrepreneurs to financing

FINALISED . NEW PLAN FOR THE NEW PERIOD ???

KOSGEB Strategic Plan (2011-2015)

Strategic Objectives:

1. Developing managerial and institutional skills of SMEs
2. Enhancing R&D and innovation capacity of SMEs
3. Supporting entrepreneurship and to promote establishment of the new successful SMEs
4. To ensure continuous improvement of KOSGEB to provide qualified services to SME



Now to increase EE in SMEs,
KOSGEB EE Strategy is being
prepared in the Technical
Assistance Project



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