NDC Spotlight Webinar Series

# Enhancing Climate Action in Turkey: Zero Waste Programme

12<sup>th</sup> June, 2019



Tugba Icmeli, UNFCCC

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# Enhancing Climate Action in Turkey: Information on INDC and efforts on climate change



Ms. Damla Dogan, Ministry of Environment and Urbanization, Turkey



# **Ministry of Environment and Urbanization**

General Directorate of Environmental Management Department of Climate Change

**Turkey's INDC and Climate Actions** 

12.06.2019

#### **Turkey's INDC**

The emission reduction to be achieved by policies and plans which is stated in INDC submission compared to the BAU scenario is presented in the figure.

→ Up to 21 percent reduction in GHG emissions from the Business as Usual (BAU) level by 2030



# Climate Change

#### **Renewable energy target in INDC**

- Increasing capacity of production of electricity from solar power to 10 GW until 2030
- Increasing capacity of production of electricity from wind power to 16 GW until 2030
- Tapping the full hydroelectric potential

Also;

• Commissioning of a nuclear power plant until 2030

#### **Renewable energy investments in Turkey**

According to the projection prepared by SolarPower Europe between 2017-2021 Turkey will be in the third place among countries in solar energy installation with 6560 MW capacity.

Private sector is preparing to invest more than \$1 billion in wind power plants.

A plant for wind turbine will be established with an investment cost of more than \$ 100 million in Turkey.

In the first six months of 2017, 566 MW of solar capacity has been established and Turkey takes third place among countries with its these installations.

#### Industry targets in INDC

- Reducing emission intensity with the implementation of National Strategy and Action Plan on Energy Efficiency
- Realization of implementation of energy efficiency at industrial installations and providing financial support to energy efficiency projects
- Making studies to increase use of waste as an alternative fuel at the appropriate sectors

#### **Transportation Targets**

- Ensuring balanced utilization of transport modes in freight and passenger transport by decreasing the share of land transportation and increasing the share of sea freight and rail system transportation,
- Enhancing combined transportation,
- Implementing sustainable transportation approaches in urban areas,
- Promoting alternative fuels and clean vehicles,
- Reducing fuel consumption and emissions of land transportation with National Smart Transportation Systems Strategy Document (2014-2023) and its Action Plan (2014-2016)
- Actualizing high speed railway projects,
- Increasing urban railway systems,
- Providing fuel saving by tunnel construction projects,
- Withdrawal of old vehicles from traffic,
- Implementing green harbor and green airport projects to ensure energy efficiency,
- Providing fuel without special consumption tax for sea transportation,

#### **Buildings and Urban Transformation targets in INDC**

- Constructing new residential buildings and service buildings as energy efficient in accordance with the Energy Performance of Buildings Regulations
- Creating Energy Performance Certificates for new and existing buildings so as to control energy consumption and greenhouse gas emissions and to reduce energy consumption per square meter
- Reducing the consumption of primary energy sources of new and existing buildings by means of design, technological equipment, building materials, development of channels that promote the use of renewable energy sources (loans, tax reduction, etc.)
- Dissemination of Green Building, passive energy, zero-energy house design in order to minimize the energy demand and to ensure local production of energy

#### **Agriculture Targets**

- Providing fuel savings by land consolidation in agricultural areas
- Rehabilitation of grazing lands
- Controlling use of fertilizers and implementing good agricultural practices
- Supporting the minimum tillage methods

#### Waste targets in INDC

- Sending solid wastes to managed landfill sites
- Reuse, recycle and use of other processes to recover secondary raw materials, to utilize as energy source or to remove wastes
- The amount of biodegradable wastes which will be stored in 2015 will be decreased to 75% of the weight amount of 2005 biodegradable wastes, to 50% in 2018 and to 35% in 2025, and establishment of pre-treatment facilities
- Recovering energy from waste by using processes such as material recycling of wastes, biodrying, bio-methanization, composting, advanced thermal processes or incineration
- Recovery of methane gas from landfill gas from managed and unmanaged landfill sites
- Utilization of industrial wastes as an alternative raw material or alternative fuel in other industrial sectors, through industrial symbiosis approach
- Conducting relevant studies to utilize wastes generated from breeding farms and poultry farms
- Rehabilitation of unmanaged waste sites and ensuring wastes to be deposited at managed landfill sites.

#### **Forestry Targets**

- Increasing sink areas and preventing land degradation
- Implementing Action Plan on Forestry Rehabilitation and National Afforestation Campaign

#### Turkey has established a Monitoring, Reporting and Verification System

**Regulation on Monitoring of Greenhouse Gas Emissions** has been started to be implemented in 2014 to regulate procedures and principles for monitoring, reporting and verification of greenhouse gas emissions resulting from the activities listed in Annex 1.

The regulation is adapted from 600/2012/EC and 601/2012/EC excluding CCS and aviation

MRV system assists to monitor 50 percent of national GHG emissions at installation level.



#### **Partnership for Market Readiness Project**

Objectives:

- Identify key sectors and GHG reduction potential in sectors
- Develop legal, technical and institutional arrangements necessary for the development of a national emission trading system
- Raise awareness about carbon markets in Turkey
- Carry out baseline studies at the sectoral level to enhance sectoral capacities for the implementation of market based approaches



# Thank you....

Ministry of Environment and Urbanization Damla DOGAN, Expert <u>damla.dogan@csb.gov.tr</u>

# Enhancing Climate Action in Turkey: Zero Waste Programme



Mr. Cihan Kavlak, Ministry of Environment and Urbanization, Turkey





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June 12th, 2019 - Ankara







## **NATIONAL OUTLOOK** Municipal Solid Waste Generation



#### <u>2017</u> 31 Mton



#### **NATIONAL OUTLOOK** Recling Rates













## **ZERO WASTE APPROACH** Environmental Concerns



The Zero Waste Approach and the implementations contribute to SDGs 12-13-14-15







-- Dissemination of the Zero-Waste Approach -







#### **REVISIONS - INNOVATIONS;**

- Plastic bags are being charged as of 01/01/2019 The implementation will be supporting our target to reduce the number of plastic bags used by person from 400s to 90s by the end of next year. Current datas show that a decrease around 80% has already been achieved so far.
- Mandotory deposit-refund system will be implemented by 2021
- Marketers/brand owners will pay a Recovery Contrubition Share.
- The Zero Waste Systems will be encouraged (incentives / penalties)
- Criterias for packaging waste sorting facilities have been revised/improved.
- Packaging producers will use a certain rate of recycled material in production.
- We are working on integrating the zero waste system to marine litters.
- An action plan regarding single-use-plastics









## **ZERO WASTE TARGETS**

- Decreasing plastic bag use per person from 400s to 90s until the end of next year
- Labouring 100.000 people directly until 2023
- Increasing recovery rate to %35 by the end of 2023
- Finding low cost solutions regarding waste management services for the local authorities
- Generating 20 Billion ₺ /year (~3.2 Billion €) additional income and reducing national current deficit by 8%



#### **GLOBAL RECYCLING LEADERS -1/2**



Ref: Eunomia, 2017



#### **GLOBAL RECYCLING LEADERS -2/2**





# T.C. ÇEVRE VE ŞEHİRCİLİK BAKANLIĞI

# Thank You

NDC Spotlight 12<sup>th</sup> June 2019

# Enhancing Climate Action in Turkey: Zero Waste Programme

**Q&A Session** 

