COP 22

The Role of Turkish Business Community on Development & Implementation of Turkish INDC
TUSIAD in brief

- A countable partner in policy making
- Member of Coordination Board on Climate Change (CBCC)
Development of Turkish INDC and TUSIAD Involvement

• INDC Preparation Project: Projection Study
  ➢ Economic growth
  ➢ Energy demand
  ➢ Land management
  ➢ GHG Emissions
  ➢ Planned policy instruments
• Coordinator: Ministry of Environment and Urbanization
• Discussed in CBCC and Working Group Meetings
• Position papers
INDC of Turkey

Total Greenhouse Gas Emissions (Million Ton CO$_2$e)

- **Business-As-Usual Scenario**
- **Mitigation Scenario**

- **2010:** 430, 449
- **2015:** 477, 535
- **2020:** 572, 599
- **2025:** 673, 843
- **2030:** 929, 934
- **2035:** 929, 1,175
INDC of Turkey

**Energy**
- Wind energy capacity by 2030: 16 GW
- Solar capacity by 2030: 10 GW
- Reducing electricity losses to: % 15
- Tapping hydro power potential

**Industry**
- Reducing energy intensity
- Efficiency support measures

**Transport**
- Promoting alternative fuels and clean vehicles
- Increasing the share of maritime and rail transport

**Agriculture**
- Supporting the minimum tillage methods
- Controlling the use of fertilizers and implementing modern agricultural practices

**Forestry**
- Increasing sink areas and preventing land degradation

**Waste Management**
- Promoting energy generation from waste

**Buildings and Urban Transformation**
- Creating Energy Performance Certificates for new and existing buildings
- Reducing the consumption of primary energy sources of new and existing buildings
Current Policy Instruments

Regulatory Mechanisms and Financial Incentives

- Renewable Energy Law
- Energy Efficiency Law
  - Regulation for the Promotion of Efficient Use of Energy and Energy Sources
- Regulation on the Program to Support Research and Development Projects in the Energy Sector
- Regulation on energy labeling and eco-design
- Regulation on energy performance of buildings
What is at stake?

Need of consistency
- Wind energy capacity: 16 or 20 GW?
- Electricity loss: 15 or 8%?
- Energy intensity goal on Industry Strategy: 20% (not mentioned in INDC)

Projections vs Reality
- Economic slow-down?

Instruments under discussion
- Partnership for Market Readiness Program (PMR)
  - Emissions Trading Scheme
  - Carbon Tax
- Energy Efficiency Action Plan
  - Electricity tax
  - Climate tax
- Revised renewable support scheme
TUSIAD Study: Climate Change Mitigation with an Economic Perspective

An analysis on current and potential climate policy instruments in Turkey

- Market-based instruments (emissions trading, carbon tax etc)
- Command control instruments (regulations and standards)
- Disclosure instruments (energy labels etc.)

• Overview on global practices
• Discussions in Turkey
• Economic impact analysis
TUSIAD Study: Climate Change Mitigation with an Economic Perspective

Results

Emissions Trading (ETS)
• Infrastructure is not ready
• MRV system needs to prove itself

Carbon tax
• Large economic impacts, especially on carbon intense sectors, which are also the current drivers of growth (cement, steel, automotive, home appliances)

Neutral carbon tax: Carbon tax + tax wavers on employment
• Relatively less but major effects on economy, especially on carbon intense sectors
• Impacts might be minimized if tax wavers are extended in other areas in accordance with sector sensitivity (i.e. tax wavers for low carbon products etc.)

Suggestion: An Inclusive Climate Package
• ETS and/or neutral carbon tax + non market instruments (i.e. energy performance certificates and standards, renewable energy certificates, R&D and technology support mechanisms etc.)
• Reformed and durable renewable energy legislation,
• A road map for 20% energy efficiency goal
• Electricity and natural gas sector liberalization
Other areas focus

• Energy sector projections → Supply mix and Market structure
• Resource efficiency → B20 Task Force within 2016 Agenda
• Circular economy → closely following the EU Legislation and discussing potential regulations with Turkish policy makers
• Industry 4.0 → Potential effects on the industry? How could it be mobilized in Turkey
• Food security → Impacts of climate change on food industry
Thank You…