



# TURKEY'S CLIMATE CHANGE ACTION PLAN



# Coordination Board on Climate Change

## ***Chair***

Ministry of Environment and Forestry

## ***Members***

- Ministry of Foreign Affairs
- Ministry of Finance
- Ministry of Public Works and Settlement
- Ministry of Health
- Ministry of Transport and Communications
- Ministry of Agriculture and Rural Affairs
- Ministry of Industry and Trade
- Ministry of Energy and National Resources
- Undersecretariat of State Planning Organization
- Undersecretariat of Treasury
- Turkish Union of Chambers and Commodity Exchanges
- Turkish Industry and Business Association

# NCCAP Project Badge

<b><i>Executing Entity:</i></b>	Republic of Turkey Ministry of Environment and Forestry (MoEF)
<b><i>Implementing Agency:</i></b>	UNDP - <i>United Nations Development Program</i>
<b><i>Funding Agencies:</i></b>	UK's Foreign and Commonwealth Office Strategic Programme Fund " <i>Low Carbon High Growth Programme</i> " Republic of Turkey Ministry of Environment and Forestry UNDP
<b><i>Total Budget:</i></b>	USD 625,000
<b><i>Project Period:</i></b>	June 2009 – June 2011

# National Climate Change Action Plan

## Goal

Development of a **robust, comprehensive and integrated *National Climate Change Action Plan***.



## Overall Objective

is to tackle climate change by cutting greenhouse gas emissions, encouraging mitigation and adaptation to climate change through a realistic, robust, durable and fair framework of commitments to international agreements and building resilience through managing impacts of climate change.

# Other Processes which affect CC Policy Development in Turkey

## International Processes

Negotiations on  
Environment  
Chapter of the EU  
Acquis started  
(December 2009)

UNFCCC  
COP 16  
Mexico  
(December  
2010)

UNFCCC  
post-2012 new  
climate regime  
start (2012)

Milestone for  
UNFCCC  
post-2012 climate  
regime (2020)

Endorsement of  
National Climate  
Change Strategy by  
Higher Planning  
Council (May 2010)

Final Draft of  
NCCAP  
(Spring 2011)

Second National  
Communication to  
UNFCCC (End of 2011)

Tenth  
Development  
Plan 2014 - 2021  
(2014)

Vision 2023

## National Processes

# Guiding Principles for Drafting Actions

- Consider achievable and affordable options
- Combine environmental effectiveness, efficiency and economic rationality
- Address interactions between mitigation and adaptation actions
- Coordinate and internalize priority actions
- Seek support for the development axes of Turkey as identified in its National Development Plan
- Seek support for the EU accession efforts of Turkey
- Consider synergy in contribution to the international commitments of Turkey
- Mainstream gender equality within the NCCAP

# Guiding Principles for NCCAP Development Process

- **The process to develop NCCAP is designed and implemented as:**
  - information-based;
  - transparent;
  - inclusive and gender-sensitive (i.e., multi-stakeholder driven, participative);
  - iterative;
  - comprehensive and integrated (multi-sectoral and multi-disciplinary);
  - implementation oriented (including performance monitoring and evaluation).
- **The process seeks but does not mandate consensus.**

# Focus of NCCAP

## NCCAP mainly focuses on:

- identification of ***immediate*** sectoral and cross-cutting actions for climate change adaptation and mitigation, which can be developed and implemented under the existing circumstances with available information, financial resources, technological and institutional capacities;
- ***addressing the identified gaps and needs*** of the sectors such as the prerequisite socio-economic and technical background studies, to enable Turkey to develop robust climate change policies aligned with its development strategies;
- ***strengthen Turkey's capacity*** for preparation of measurable-reportable-verifiable (MRV) NAMAs for its sectors; and prepare country for development of a strategy for transition to low emission economy.



# Strategic Framework of NCCAP



## TURKEY'S NATIONAL CLIMATE CHANGE STRATEGY

- Developed under the coordination of Ministry of Environment and Forestry, with participation of related institutions and organisations (February 2009 – April 2010);
- Adopted by the Higher Planning Council chaired by the Prime Minister (May 2010);
- Identified strategies and objectives for greenhouse gas control in energy, industry, transportation, waste, land use, agriculture and forestry sectors, for climate change adaptation in vulnerable areas such as water supply, food security, other ecosystem services, disaster and risk management, and human health.

# Strategic Framework of NCCAP

## TURKEY'S NATIONAL CLIMATE CHANGE STRATEGY

### NATIONAL VISION

Turkey envisions a future where, through its integrated approach toward climate change and national development, it will have an energy profile of low-carbon intensity that will be formed by largely clean and renewable resources, and where its people will enjoy a higher quality of life, and it contributes to international efforts to combat climate change within the framework of its *special circumstances*.



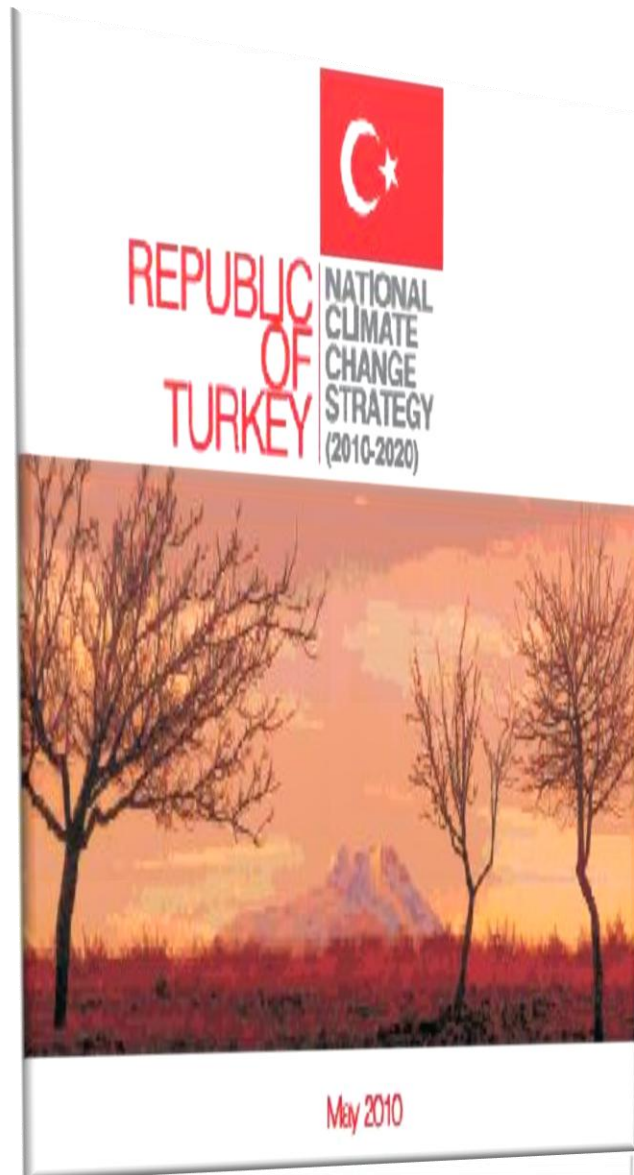
# NATIONAL CLIMATE CHANGE STRATEGY

## Strategic Objectives

- **Fulfillment of UNFCCC obligations**
- **Control of GHG emissions**
- **Proposal for Climate Change adaptation**
- **Access to national and international financial resources.**
- **Develop the clean production technology, R&D and innovation capacities.**
- **Human resources and institutional capacity building**

## Strategic Targets

- **International negotiations**
- **National Climate Change Action Plan**
- **To ensure Climate Change organizational structure and Knowledge Management.**



# NATIONAL CLIMATE CHANGE STRATEGY

## Main Headings

- **GHG Emission Control**
  - ✓ Energy
  - ✓ Transportation
  - ✓ Industry
  - ✓ Waste
  - ✓ Land Use, Agriculture and Forestry
  
- **Adaptation to Climate Change**
  
- **Technology Development and Transfer**
  
- **Finance**
  
- **Training, Capacity Building and Institutional Infrastructure**
  
- **Monitoring and Evaluation**



# NATIONAL CLIMATE CHANGE STRATEGY

## Energy Sector:

- Feasible renewable energy systems will be installed at new buildings
- By 2020, energy intensity shall be decreased with reference to 2004 levels.
- The share of renewable energy in total electricity generation shall be increased up to 30% by 2023 (hydro potential will be fully utilized, wind electricity generation capacity will be raised to 20,000 MW and geothermal electricity generation capacity will be raised to 600 MW)
- Greenhouse gas emissions from electricity generation are envisaged to be 7% less than BAU by 2020.



# NATIONAL CLIMATE CHANGE STRATEGY

## Transportation:

- Short-distance maritime and lake transport shall be encouraged
- Public transportation systems by means of subways and light rail systems shall be expanded especially in metropolitan areas
- The use of alternative fuels and clean vehicle technologies in public transport vehicles will be expanded
- Smart transportation systems will be improved
- The use of alternative fuels, new technology engines and environmentally-friendly hybrid transportation vehicles will be expanded.



# NATIONAL CLIMATE CHANGE STRATEGY



## Industry:

- The process of hiring energy managers in all industrial facilities with annual energy consumption of more than 1,000 toe shall be finalized
- All industrial facilities with annual energy consumption of more than 5,000 toe will conduct annual energy studies
- Incentive mechanisms will be introduced to promote cleaner production, climate-friendly and innovative technologies
- The determined saving potential shall be realized at maximum levels by the year 2020

# NATIONAL CLIMATE CHANGE STRATEGY

## Waste:

- The amount of waste reuse and recovery will be increased within the framework of the Waste Action Plan (2008-2012)
- 104 sanitary landfill facilities will be established and 76% of municipal waste will be disposed at such facilities by the end of 2012
- Waste management hierarchy of source reduction, reuse, recycling, and recovery shall be implemented more efficiently
- Landfill gas will be captured and used for energy generation



T.C.

ÇEVRE VE ORMAN BAKANLIĞI  
ÇEVRE YÖNETİMİ GENEL MÜDÜRLÜĞÜ

## Atık Yönetimi Eylem Planı (2008-2012)

MAYIS - 2008  
ANKARA



# NATIONAL CLIMATE CHANGE STRATEGY

## Land Use, Agriculture and Forestry:



- Strategies for mitigation and adaptation to climate change in settlements shall be developed together with procedures and principles for planning and housing
- Techniques will be developed to increase carbon absorption in soil; agricultural producers shall be encouraged to adopt such techniques
- 2.3 million hectares of land will be afforested and rehabilitated within the scope of National Afforestation Campaign between the years 2008 – 2012

# NATIONAL CLIMATE CHANGE STRATEGY

## Adaptation:

- Activities identified within the scope of the Agricultural Drought Strategy and Action Plan shall be implemented urgently
- Early warning systems for flood disaster reduction shall be developed and existing flood risk maps in all watersheds shall be updated
- Agricultural practices that account for the adverse impacts of climate change on water resources shall be developed to ensure the sustainability of agricultural production
- Impacts of climate change on hydroelectric energy generation capacity, tourism, health, food safety, water demand and forests will be evaluated, and preventive measures will be developed



# NATIONAL CLIMATE CHANGE STRATEGY

## Technology Development and Transfer:

- Research and development activities for climate-friendly technologies will be promoted, and cleaner production technologies will be encouraged

## Finance:

- Necessary infrastructure will be established for voluntary domestic carbon markets which provide financial assistance for reduction of greenhouse gas emissions
- Greenhouse gas emission reduction and control and adaptation projects shall be prioritized in public investment programming



# Four Steps for Development of NCCAP

## **OUTPUT 1**

Sectoral Analysis  
of the Existing  
Situation

## **OUTPUT 2**

Country peer  
reviews

## **OUTPUT 3**

Development of a  
clearly-defined  
strategy framework  
for the development  
of  
the action plan  
including  
responsibilities and  
co-ordination

## **OUTPUT 4**

National Climate  
Change Action  
Plan drafted and  
submitted to IDKK  
for consideration

## **OUTPUT 5**

National  
Conference  
on NCCAP

## **OUTPUT 6**

Strengthening the Turkish national authorities capacities  
in the framework of the National Climate Change Action Plan

# Sectoral Analyses of the Existing Situation

- **Background research:** Review and analysis of existing sectoral strategies, legislation, projects and scientific studies.
- **Stakeholder analysis** for each sector.
- **One-to-one meetings with stakeholders:** Governmental institutions, private sector, NGOs and academia.
- **Multi-stakeholder consultations:** Establishment of sectoral working groups and organisation of sectoral workshops with multi-stakeholder participation.
- **Consultations on the draft sectoral analysis reports:** through workshops, official correspondence and web.

# Sectoral Working Groups

## Energy Supply W. G.

Sub-groups: Renewables, Fossil fuels  
Focal Point: Min. of Energy and Natural Resources

## Waste W.G.

Focal Point: Min. of Environment and Forestry

## Industry W. G.

Sub-groups: Energy –intensive, non-energy intensive  
Focal Point: Min. of Industry and Trade

## Agriculture W.G.

Focal Point: Min. of Agriculture and Rural Affairs

## Transportation W.G.

Focal Point: Min. of Transport and Communication

## Forestry W.G.

Focal Point: MoEF General Directorate of Forestry

## Buildings W.G.

Focal Point: Min. of Public Works and Settlement

## Climate Change Policies W.G.

Focal Point: MoEF CC Department

### Working Group Participants:

- Governmental institutions
- Private sector organizations, professional organizations
- Academic and research institutions
- Civil society organizations

### Overall Coordination:

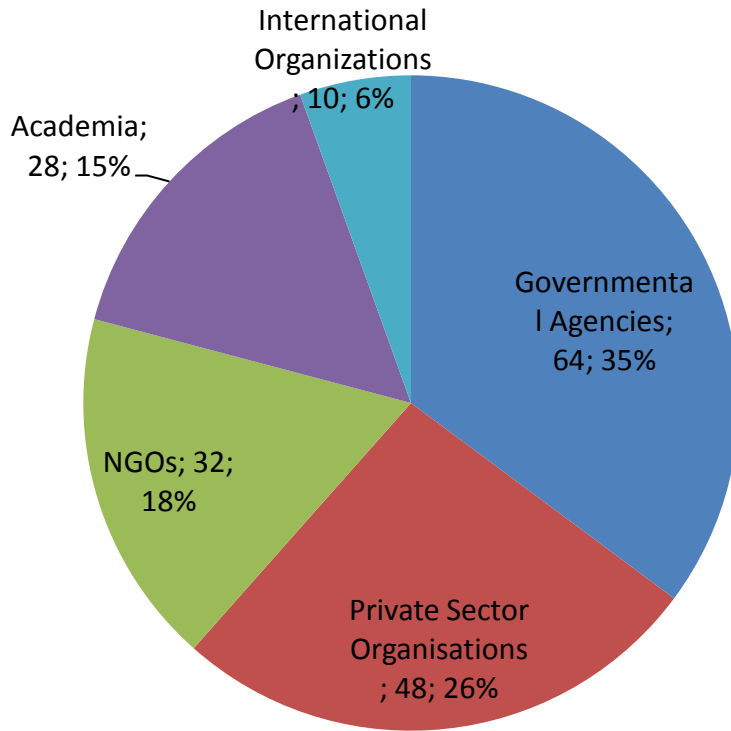
MoEF - Climate Change Department

# Consultative Process

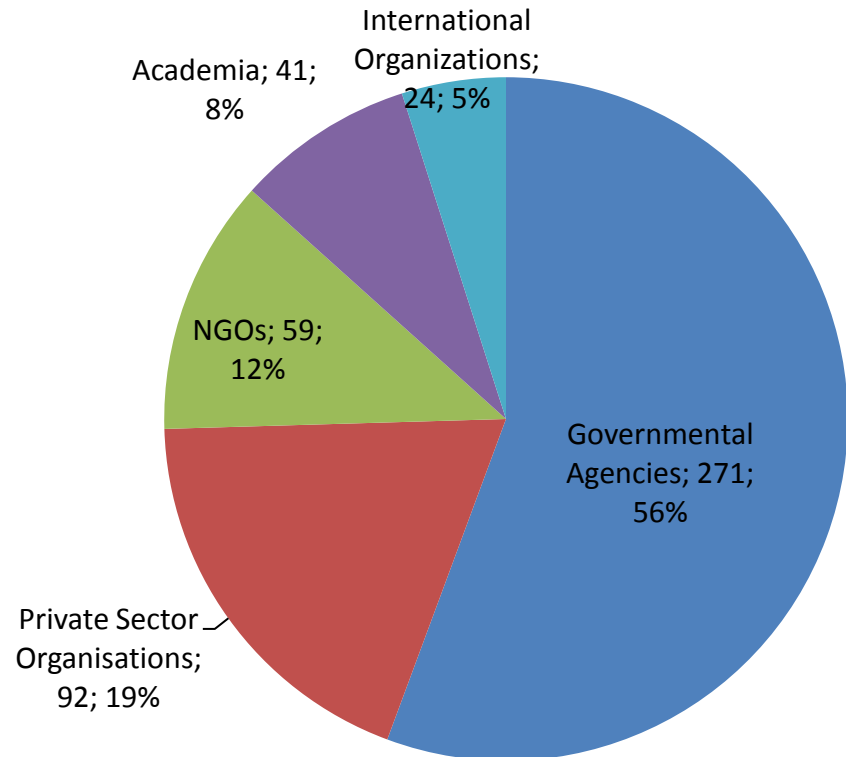
Total number of workshops: 20

Total number of experts participated in the process: 487

Total number of organizations participated in the process: 182

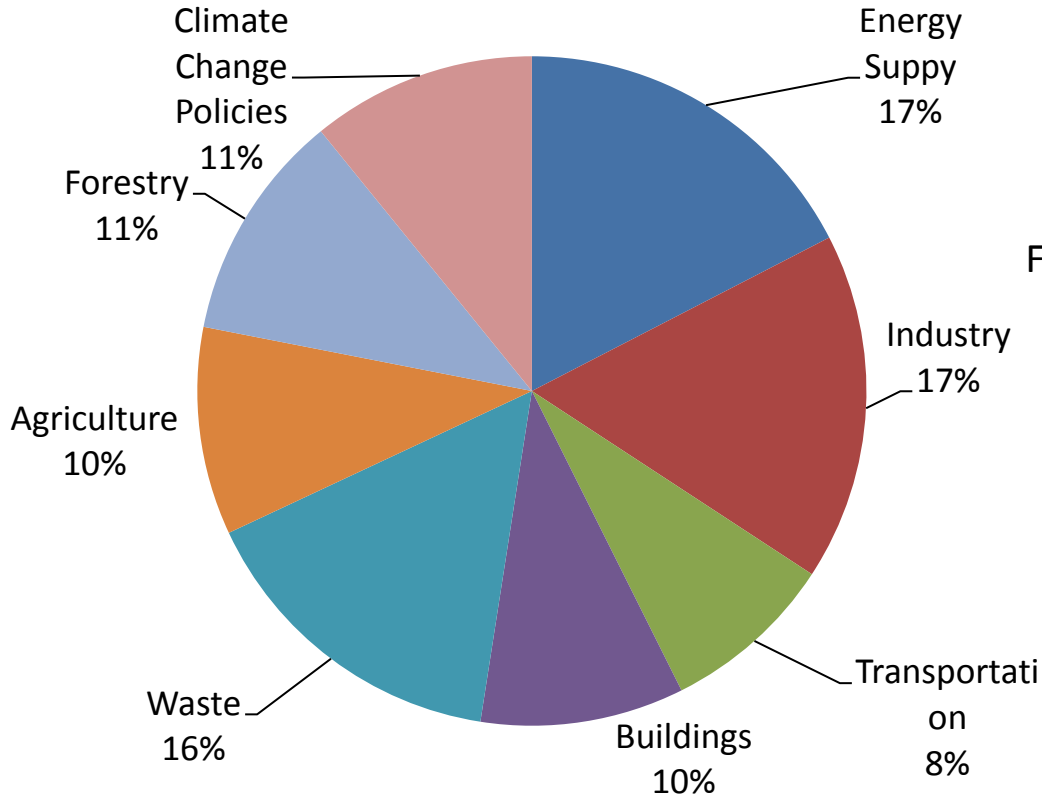


**Distribution of organizations by stakeholder groups**

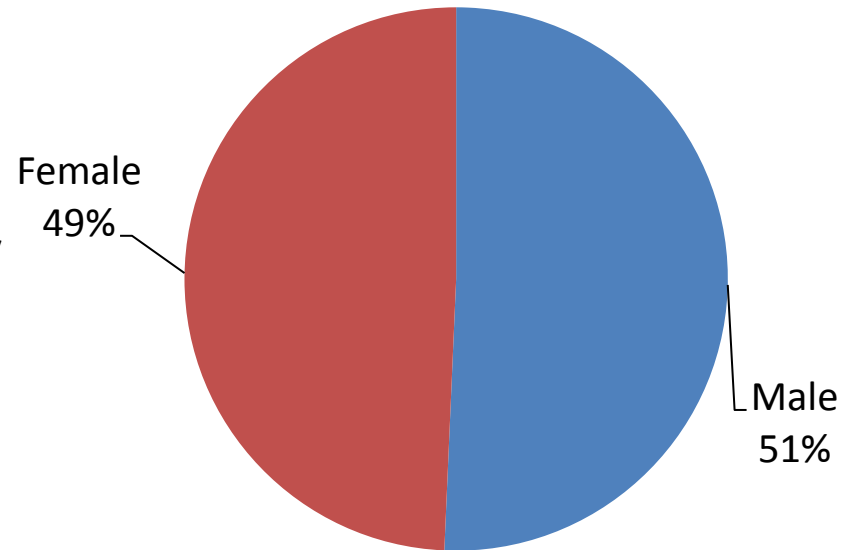


**Distribution of experts by stakeholder groups**

# Consultative Process



**Sectoral distribution of participants**



**Gender distribution of participants**



# OUTPUT 1

## Scope of the Sectoral Analysis - Step 1

- Identification of existing sectoral policies and tools to combat climate change
- Identification of gaps in policies and tools, and needs of sectors for achievement of Turkey's strategic goals and policies regarding Climate Change

Sectors	Fields of Study	Questions
<ul style="list-style-type: none"><li>▪ Energy supply<ul style="list-style-type: none"><li>○ Fossil fuels</li><li>○ Renewable sources</li></ul></li><li>▪ Industry</li><li>▪ Transportation</li><li>▪ Construction</li><li>▪ Waste Disposal</li><li>▪ Agriculture</li><li>▪ Forestry</li><li>▪ General Climate Change Policies</li></ul>	<ul style="list-style-type: none"><li>▪ Policies</li><li>▪ Legislation</li><li>▪ Institutional structure</li><li>▪ Finance</li><li>▪ Economic tools</li><li>▪ Direct investments</li><li>▪ Information management systems, monitoring and reporting</li><li>▪ Scientific and technological research and development</li><li>▪ Education/Capacity building</li></ul>	<ul style="list-style-type: none"><li>▪ What are the existing tools for combating climate change?</li><li>▪ What are the main problems/bottlenecks of the existing tools?</li><li>▪ What is missing in support of a more effective effort against climate change?</li></ul>

# OUTPUT 1

## Scope of the Sectoral Analysis - Step 2

Prioritization of sectoral needs to be addressed through NCCAP

### Prioritization Criteria:

- **Overall criterion: Sustainable development principles**
- C1: Issue's relevancy to Turkey's commitments to International Climate Regime (UNFCCC and Kyoto Protocol)
- C2: Issue's relevancy to Turkey's EU Accession Process
- C3: Issue's relevancy to Turkey's national development axes
- C4: Issue's relevancy to national legislation
- C5: Issue's environmental and external costs
- C6: Issue's impact on national economy

# **OUTPUT 1**

## **Scope of the Sectoral Analysis - Step 3**

- Drafting of sectoral analysis reports, including lists of prioritized sectoral issues to be addressed through NCCAP.
- Consultations on draft reports and proposed sectoral issues lists to be addressed through NCCAP (three months):
- More than 400 comments received from all stakeholder groups.
- Final reports to be published by MoEF.

# OUTPUT 2

## Country Peer Reviews

### Country Selection criteria

#### Quality indicator:

countries/regions that prepared comprehensive action plans which integrate mitigation and adaptation actions into the policymaking process .

#### Similarity indicator:

*Mitigation:* similarity in energy intensity, GDP growth

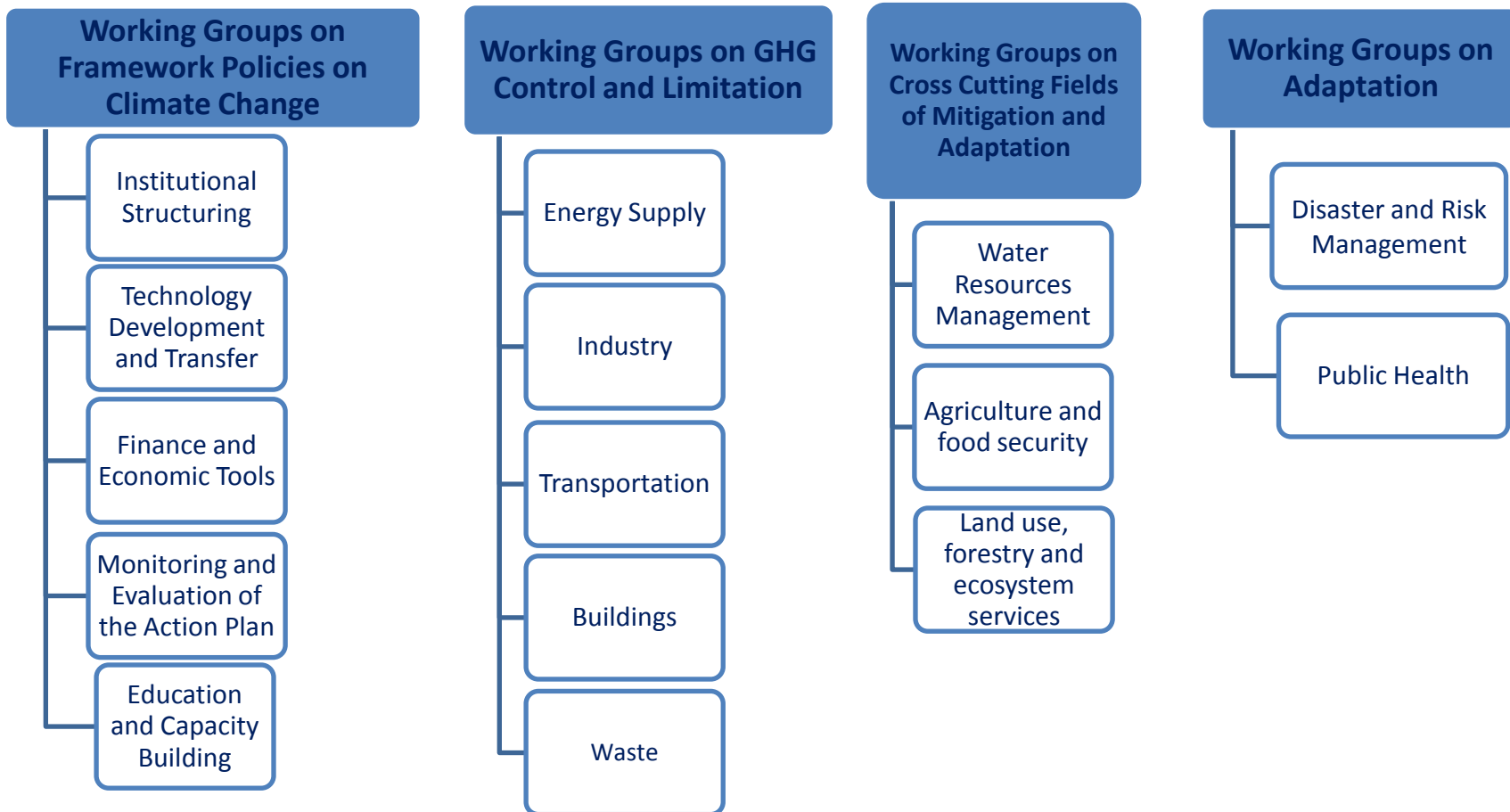
*Adaptation:* similarity to Turkey regarding the vulnerable sectors identified in Turkey's initial national communication.

#### Political indicator:

OECD membership, EU membership/accession, etc.

## OUTPUT 3 and 4

### Sectoral/thematic working groups of the NCCAP drafting process



#### Members of the Sectoral/Thematic Working Groups:

Governmental agencies (including central and local authorities), private sector organisations, non-governmental organisations, academia.

# Draft Table of Contents of the NCCAP

- **Executive Summary**
- **Introduction**
- **Overall Goal, Objective and Targets of the NCCAP**
- **Outcomes of the Stocktaking Analysis**

- **Actions**

- **MITIGATION**

- Energy Supply
- Transport
- Industry
- Buildings
- Waste
- Land Use, Agriculture and Forestry

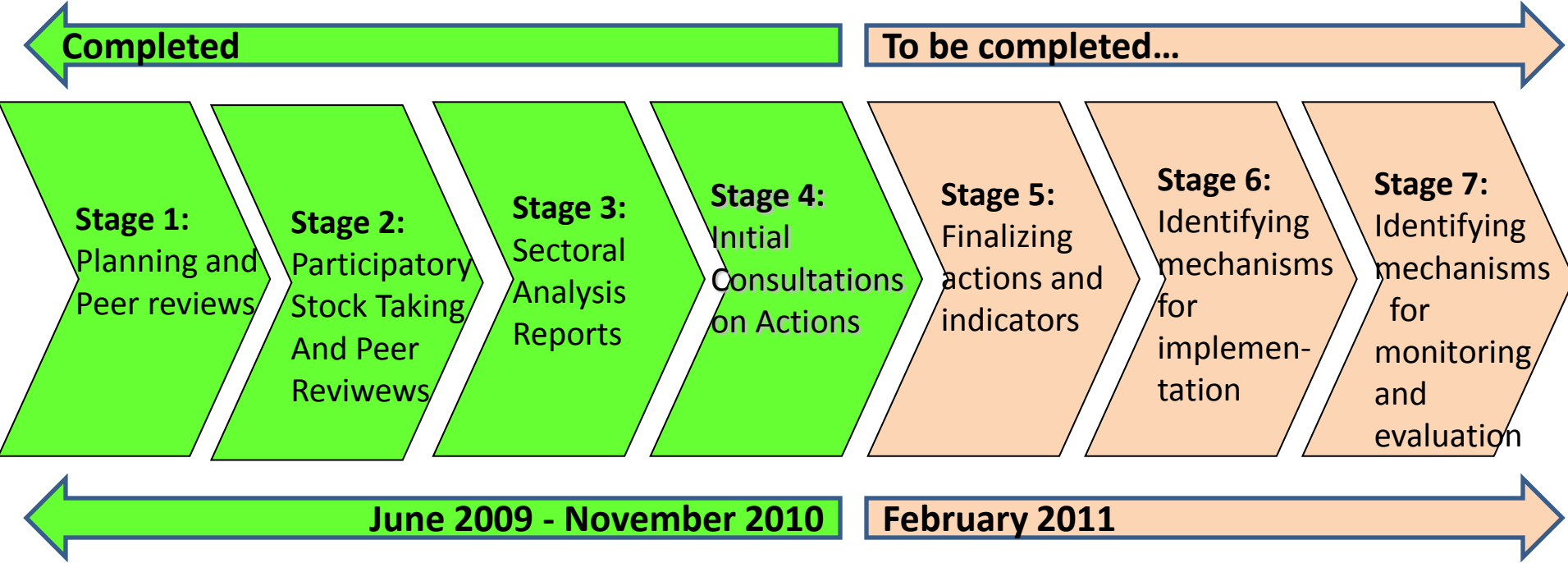
- **ADAPTATION**

- Water Resources Management
- Biodiversity and Ecosystem Services
- Food Safety
- Natural Disasters and Risk Management
- Human Health

- **CROSS-CUTTING ISSUES**

- Legal and Institutional Structure
- Technology Development and Transfer
- Climate Change Finance
- Education and Capacity Building

# Next Steps of NCCAP Drafting Process





**THANK YOU**

