



Organizing Framework for Scoping of PMR Activities

Country: **TURKEY**

Responsible official: **Fulya Somunkıranoğlu**

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Outline

1. Policy context: Domestic mitigation objectives and role of market instrument(s)
 1. Policy context, objectives and envisioned role for new market instruments
 2. Overview of country's GHG emissions
 3. Interest in market-based instrument(s)*
2. Organization and consultations
 1. PMR contact
 2. Partners in the formulation and implementation of the country's Market Readiness Proposal
3. Technical building blocks of Market Readiness
 1. Taking stock of relevant sectors (and/or region) – *1 slide per sector/region*
 2. OPTIONAL – Assessment of readiness of sector(s)/ region(s)
 3. OPTIONAL - System for domestic measurement, reporting and verification (MRV)
 4. OPTIONAL - Institutional/legal components
4. Other key relevant initiatives
5. Organization of work and estimated timeline
6. Other relevant information
7. Conclusions – Summary of market readiness priority areas for PMR support

**For the purpose of the PMR, market instruments refer to domestic instruments (e.g., emissions trading scheme) and, without prejudging the outcomes under the United Nations Framework Convention on Climate Change negotiations, scaled-up market mechanisms.*

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

- ◆ Turkey's national vision within the scope of climate change is to become a country **fully integrating climate change-related objectives into its development policies**, disseminating energy efficiency, increasing the use of clean and renewable energy resources, **actively participating in the efforts for tackling climate change** within its special circumstances and providing its citizens with a high quality of life and welfare.
- ◆ The National Climate Change Strategy Document, adopted on May 3, 2010, **identifies policies for mitigating climate change**, as well as urgent measures for adapting to climate change.
- ◆ The sectors covered by the National Climate Change Strategy are; **Energy, Industry, Waste, Transportation, Agriculture and LULUCF**.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

- ◆ Although an **Annex – I** country, Turkey is **not listed in the Annex B** of the Kyoto Protocol, which implies that Turkey has not adopted any target for limitation or reduction of emissions of greenhouse gases in the period 2008-2012. Therefore, **Turkey is not participating in the flexible mechanisms of the Kyoto Protocol for the first commitment period.**
- ◆ In the period 2008-2012, participation in the Voluntary Carbon Markets (VCMs) is the only market tool for Turkey. **It is estimated that more than 100 VCM projects are being implemented in Turkey.** In order to keep a track of these projects, the Ministry of Environment and Forestry issued a **Communication on Registry Operations of Greenhouse Gas Emission Reduction Projects** in August 2010.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

- ◆ Turkish Environmental Law identifies **carbon trading** as one of the mechanisms to be used to protect the environment (Article 4, paragraph h)
- ◆ EU Environment Chapter opened in 2010. **Emissions Trading Directive (2003/87/EC)** is a part of the legislation to be transposed into Turkish Law.
- ◆ By the end of 2011 MRG will be adopted by law (planned)
- ◆ Ministry of Environment and Forestry issued a **Communication on Registry Operations of Greenhouse Gas Emission Reduction Projects**
- ◆ National Climate Change Strategy
- ◆ National Climate Change Action Plan

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

National Climate Change Strategy

Waste

- ◆ Municipal Solid Waste Action Plan
- ◆ Waste management to reduce, reuse, recycle and recovery of waste
- ◆ Utilize landfill gas

Finance and Technology Transfer

- ◆ Mid term goals to establish necessary structures for voluntary markets
 - provide financial assistance for reduction of greenhouse gas emissions
 - technology transfer and dissemination, and research and development activities
- ◆ Long term goals to establish innovative and sustainable additional financing resources to support the efforts for mitigating and adapting to climate change including technology transfer.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

National Climate Change Strategy

Energy

- ◆ Utilize all technically and economically feasible renewable energy resources by 2023.
- ◆ Promote energy efficiency in electricity production , buildings and industry.
- ◆ Fuel switch, new and alternative technologies, etc.

Industry and Transport

- ◆ increase the share and load factor of railways, seaways and airways in freight and public transport
- ◆ Obligation to employ “energy manager” for in industrial facilities
- ◆ Promote energy efficiency

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

Climate Change Action Plan (Draft)

Monitoring of GHGs

- ◆ Improve GHG inventory at the national level
- ◆ Monitor GHGs from all sources at the installation level

Market Mechanisms

- ◆ Conduct studies to ensure Turkey's participation to the new market based mechanisms for the post 2012 regime.
- ◆ Conduct studies and establish necessary legal and institutional structures for national carbon markets and national emissions trading scheme.
- ◆ Increase awareness

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

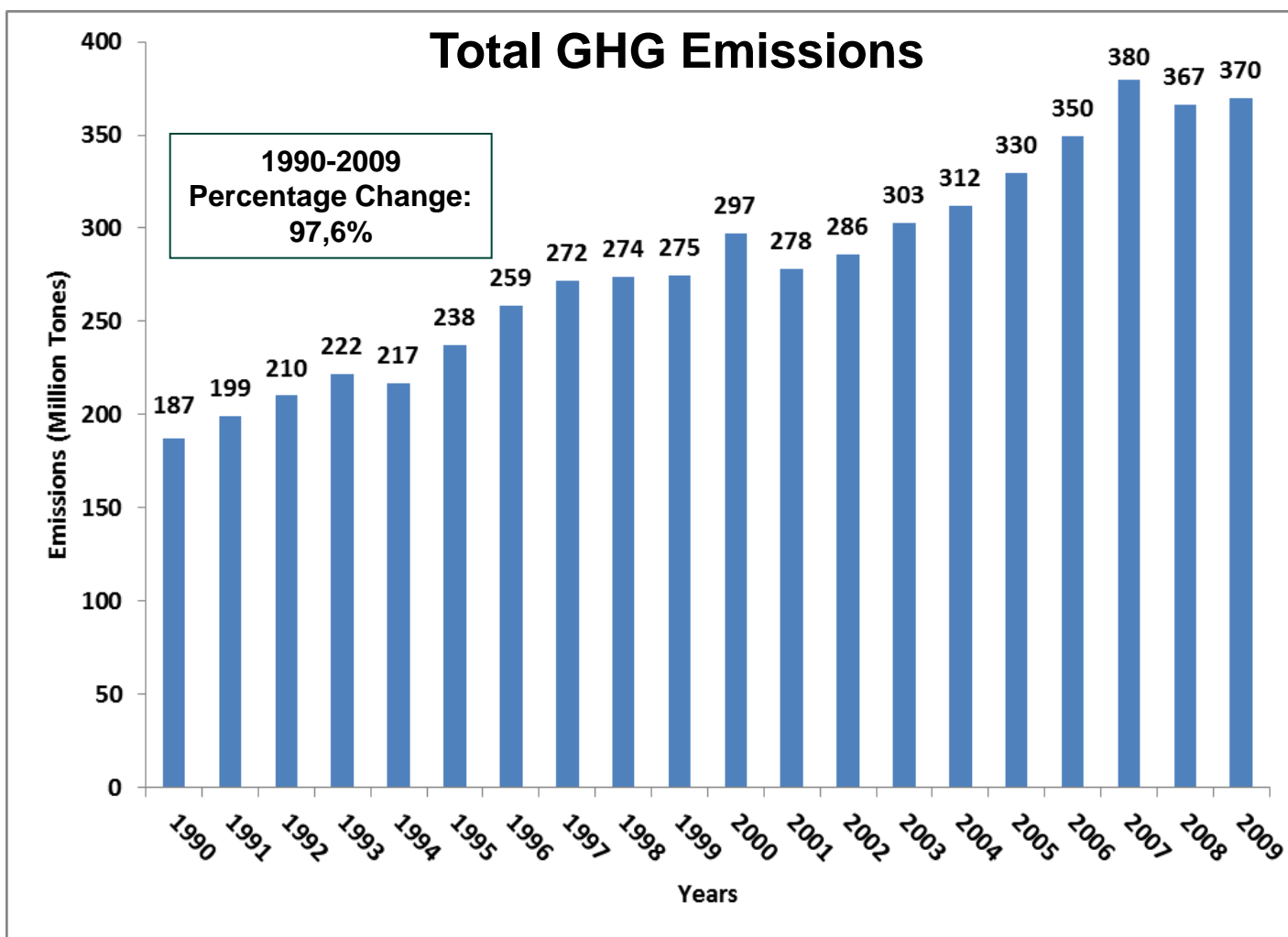
1.1 Policy context, objectives and envisioned role for new market instruments

Voluntary Carbon Project Registry

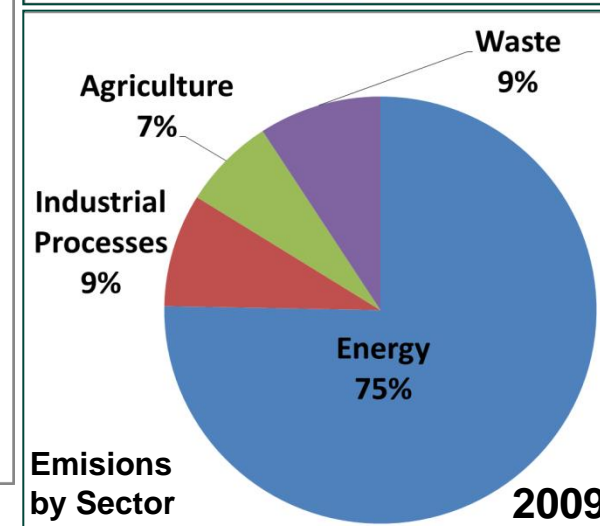
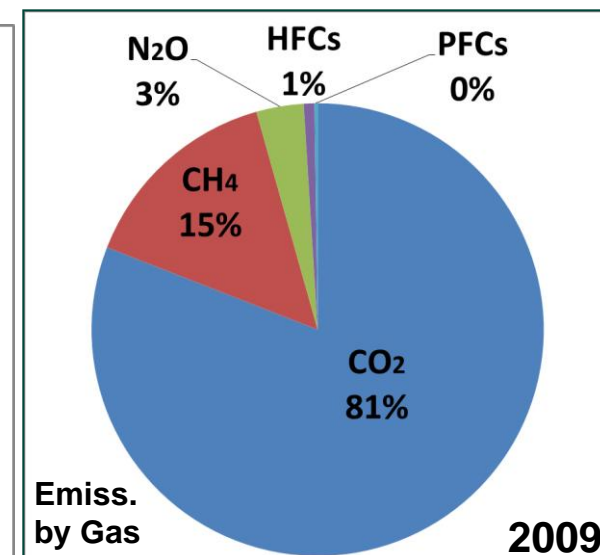
- ◆ Although Turkey cannot benefit from the market-based flexible mechanisms of the Kyoto Protocol; it has rapidly carved out a “niche” position for itself in the voluntary carbon market.
- ◆ Need for registry system in Turkey which will lead to a more efficient market.
- ◆ Registry will increase the credibility and value of Turkish voluntary carbon credits.
- ◆ MoEF issues a certificate to the registered project owners

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (2/3)

1.2 Overview of country's GHG emissions



Source: Turkish National GHG Inventory, April 2011



1. Policy context: Domestic mitigation objectives and role of market instrument(s) (3/3)

1.3 Interest in market-based instrument(s)

- ◆ Turkey's experience in the international carbon markets is limited to voluntary carbon markets. Turkey is currently exploring ways to integrate into new carbon markets. Therefore, there is need for capacity building at different levels.

- ◆ Turkey identified 3 main areas of focus for PMR support:
 1. Improving MRV Processes
 2. Capacity Building on Institutional and Legal Framework
 3. Piloting

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (3/3)

1.3 Interest in market-based instrument(s)

Improving the MRV Process

- ◆ Turkey is subject to Annex-1 reporting obligations under the UNFCCC.
- ◆ However, MRV procedures for the implementation of the EU-ETS need to be improved. Installation level monitoring, reporting and verification procedures.
- ◆ Turkey plans to establish legal procedure for the monitoring of GHGs at the installation level based of the MRG of the EU-ETS by the end of 2011. Installations which are going to fall under this system need urgent capacity building. Governmental institutions also require capacity building.
- ◆ Turkey also needs to carry out baseline studies at the sectoral level to enhance sectoral capacities for the implementation of market based approaches.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (3/3)

1.3 Interest in market-based instrument(s)

Piloting

- ◆ Turkey is considering establishing a **carbon exchange** as one of the main pillars of the **Istanbul Financial Center Strategy and Action Plan**.

- ◆ Strategy which aims to transform Istanbul to a regional financial center in Middle East and North Africa and Eurasia regions.

- ◆ According to the plan, **the exchange will start its operations by 2015** depending on the Turkey's situation in the post-2012 climate change regime.

- ◆ Turkey wishes to seek opportunities for emission trading mechanisms.
 - Various options for cap & trade (i.e. voluntary but legally binding)
 - Sectoral crediting

2. Organization and consultations (1/2)

2.1 PMR contact point

Climate Change activities are coordinated by the Ministry of Environment and Forestry under the Coordination Board on Climate Change. Ministry of Environment and Forestry is the coordinating institution for the PMR Project.

Designated PMR Government focal point:

Ms. Fulya SOMUNKIRANOGLU

Head of Climate Change Department

Ministry of Environment and Forestry

Ankara / TURKEY

Phone: +90-312-2076610

Fax: +90-312-2076446

E-Mail: fulyas@cob.gov.tr

2. Organization and consultations (2/2)

2.2 Partners in the formulation and implementation of the country's Market Readiness Proposal

Climate Change activities are coordinated by the Ministry of Environment and Forestry under the **Coordination Board on Climate Change (CBCC)**.

This Board is composed of high level representatives from :

- Ministry of Environment and Forestry
- Ministry of Foreign Affairs
- Ministry of Public Works and Settlement
- Ministry of Transport and Communication
- Ministry of Agriculture and Rural Affairs
- Ministry of Industry and Trade
- Ministry of Energy and Natural Resources
- Ministry of Finance
- Ministry of Health
- Undersecretariat of State Planning Organization
- Undersecretariat of Treasury
- Union of Chambers and Commodity Exchanges of Turkey
- Turkish Industrialists' and Businessmen's Association.

2. Organization and consultations (2/2)

2.2 Partners in the formulation and implementation of the country's Market Readiness Proposal

Technical working group on Carbon Markets

- ❑ Established under the CBCC in 2010
- ❑ Coordinated by Ministry of Environment and Forestry
- ❑ Aims to provide technical feedback regarding the policy making process for carbon markets in Turkey.

The PMR process will be **coordinated by the Ministry of Environment and Forestry** at and all the institutions that are represented in the CBCC will be involved. At the implementation phase the relevant government agency/agencies will assume the responsibility for coordination.

3. Technical building blocks of market-readiness (1/4)

3.1 Taking stock of relevant sectors (and/or regions) – *(1 slide per sector/region)*

Turkey will use PMR Support to establish installation based monitoring, reporting and verification procedures.

Activities and gases that are currently covered by the EU-ETS and the activities that will be covered during the third trading period will be the main focus of Turkey under PMR.

Greenhouse Gases to be monitored:

- ◆ *Carbon dioxide (CO₂)*
- ◆ *Methane (CH₄)*
- ◆ *Nitrous Oxide (N₂O)*
- ◆ *Hydrofluorocarbons (HFCs)*
- ◆ *Perfluorocarbons (PFCs)*
- ◆ *Sulphur Hexafluoride (SF₆)*

3. Technical building blocks of market-readiness (1/4)

3.1 Taking stock of relevant sectors (and/or regions) – *(1 slide per sector/region)*

Activities that will fall under the mandatory monitoring according to Annex I to Directive 2003/87/EC

1. Combustion emissions (power stations, combustion plants, etc.)
2. Mineral oil refineries
3. Coke ovens
4. Metal ore roasting and sintering installations
5. Production of pig iron and steel including continuous casting
6. Production of cement clinker
7. Production of lime
8. Manufacture of glass
9. Manufacture of ceramic products
10. Pulp and paper producing installations
11. Nitric acid, adipic acid, caprolactam, glyoxal and glyoxylic acid production
12. Petrochemicals, ammonia and aluminium industries
13. Aviation activities

3. Technical building blocks of market-readiness (2/4)

3.2 OPTIONAL - Assessment of readiness of sector/region *(to be specified by country)*

Since, energy generation and consumption accounts for 76 % (2008 figures) of total GHG emissions, Turkey's mitigation goals regarding "renewable energy" and "energy efficiency;

We have adopted a very ambitious goal of increasing the share of renewables in electricity generation to at least 30% by 2023. (Currently, around 20%).

Furthermore, we aim to decrease our primary energy intensity by 20% by 2023 compared to 2008 levels.

However, clean energy investments in Turkey face various and significant barriers. Thus, as we put forward in our Climate Change Strategy, the extent to which our mitigation goals are met depends on the availability of concessional financing and access to market mechanisms. Up to now, no energy efficiency project in Turkey benefited from the carbon market.

4. Technical building blocks of market-readiness (4/4)

4.2 OPTIONAL- Institutional/legal components

- ◆ Ministry of Environment and Forestry will have the overall responsibility for the design and coordination for the mechanism. The Ministry will also be in charge of data collection, implementation and will act as the authority to ensure the compliance.

- ◆ Stakeholders for data collection and implementation for specific sectors:
 - Energy sector – Ministry of Energy and Natural Resources
 - Aviation – Ministry of Transport and Communication

- ◆ Verification will be conducted by independent accredited entities.

3. Technical building blocks of market-readiness (3/4)

3.3 OPTIONAL - System for domestic measurement, reporting and verification (MRV)

Turkey will adopt Monitoring and Reporting guidelines in parallel to the guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC. Verification procedures will also be in line with the EU-ETS MRG.

Turkey wishes to seek for **innovative approaches** to promote GHG mitigation.

Possible areas of interest for Turkey under the PMR can be listed as:

- Surveys, Consultancy, Papers, etc...
- Proposing Monitoring and Reporting Guidelines, Verification procedures
- Domestic compliance system for MRV
- Piloting (emissions trading and exchange)
- Determining sectoral benchmarks and baselines
- Establishment of Accreditation criteria and procedures for the verifiers
- Establishment of necessary IT structure for above mentioned tasks including a web based monitoring and reporting structure.
- Capacity building for the government (monitoring plans, inspection and enforcement, etc.) and operators

5. Other key relevant initiatives

Ministry of Environment and Forestry developed and submitted a project proposal to the European Union under IPA programme.

Projects purpose is transposition of the provision in the upcoming revision of 280/2004/EC Decision and strengthening the administrative and institutional capacity of the organizations responsible for monitoring, reporting and verification of GHG emissions and National Communications.

Project's expected results are:

1. Establishment of the necessary legal conditions for 280/2004/EC
2. Capacity building of related institutions provided on the revised Decision 280/2004/EC.
3. Improvements of GHG Inventory quality
4. Improvements of National Communication quality

6. Organization of work and estimated timeline (1/2)

6.1 Overview of organization of work/tasks envisioned for Preparation Phase to conduct the scoping of market readiness activities

PMR activities will be coordinated by the Ministry of Environment and Forestry under the Coordination Board on Climate Change.

All stakeholders, including NGOs that are not represented under the CBCC will be involved in all relevant activities.

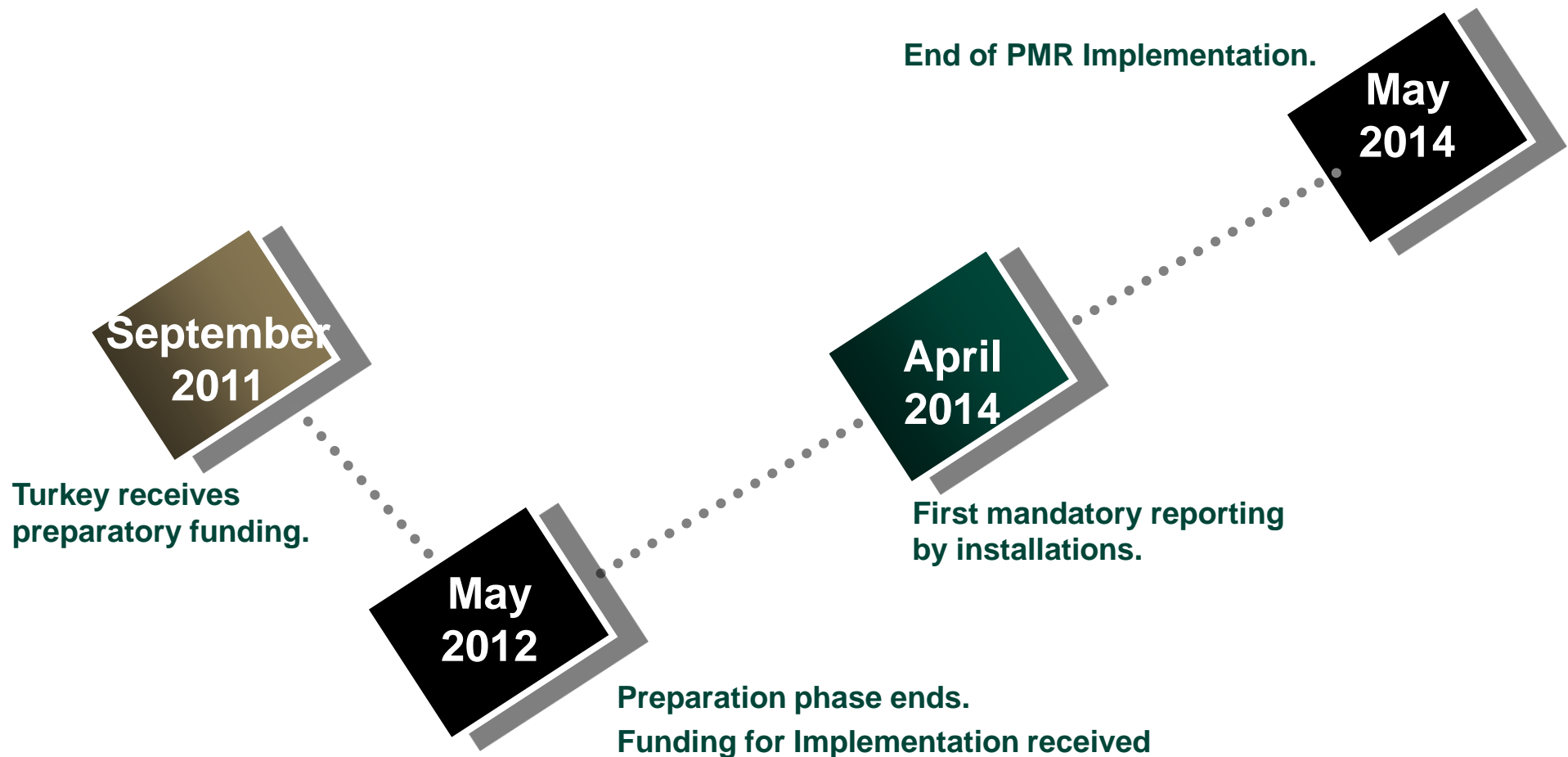
The Ministry will ensure official invitations to workshops, meetings and other events to be sent to the stakeholders.

Donor coordination shall be integrated into the PMR process to ensure complementarity among technical assistance activities of international institutions on carbon markets.

6. Organization of work and estimated timeline (2/2)

6.2 Overview of estimated timeline for formulation of Market Readiness Proposal

Proposed timeline for PMR activities:



8. Conclusions – Summary of market readiness priority areas for PMR support

- ◆ Turkey's national vision for climate change is to become a country fully integrating climate change-related objectives into its development policies, disseminating energy efficiency, increasing the use of clean and renewable energy resources, and actively participating in the efforts for tackling climate change within its special circumstances.
- ◆ Turkey established framework institutions for climate change governance. Already shown political will to utilize carbon markets to support its mitigation objectives. A voluntary carbon registry is established!
- ◆ Turkey has very limited experience in regards of carbon markets. EU accession brings additional work to be done!

8. Conclusions – Summary of market readiness priority areas for PMR support

Identified areas for PMR Support:

- ◆ Improving MRV
 - Enable installation level monitoring in line with EU-ETS
 - Reporting and Verification
 - Enhance dialogue

- ◆ Capacity Building
 - Conduct studies, make reviews, prepare papers, etc.
 - Institutional capacity building for government
 - Capacity building for the operators and verifiers
 - Necessary structures for continuous dialogue

- ◆ Piloting
 - Seek opportunities for trading systems and sectoral crediting.
 - Set up a carbon exchange under the Istanbul Gold Exchange

8. Conclusions – Summary of market readiness priority areas for PMR support

- ◆ Ministry of environment and forestry will ensure a transparent process and participation all governmental, private sector and non-governmental stakeholders into the PMR process. Coordination with other actors dealing with carbon markets.
- ◆ Turkey wishes to be an active player in the post-2012 market based mechanisms. PMR will also serve to build capacity regarding these mechanisms.
- ◆ We believe PMR will contribute significantly to efforts to effectively use market mechanisms by providing not only technical assistance but also a platform for technical discussions with peer countries. This would enable us to build capacity and pilot market instruments for scaling up our GHG limitation efforts.
- ◆ Being an upper middle income developing country with a EU vision Turkey stands in a position between developed and developing countries.

For any question, clarification or comment on this
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Evren TURKMENOGU