GREENHOUSE GAS EMISSION MITIGATION ACTION PLAN FOR THE STATE OF ISRAEL: STRATEGIES, INCENTIVES AND REPORTING

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Overview

Israel ratified the United Nations Framework Convention on Climate Change in 1996 and the Kyoto Protocol to the Convention in 2004 and is committed to contribute to the global efforts to reduce greenhouse gas emissions and to combat the harmful impacts of climate change[1].

Israel, the newest member of the Organization for Economic Cooperation and Development (OECD), is experiencing a growing population and a fast expanding economy and is attempting to chart a course for steering its economy into a low-carbon future while accommodating continued economic growth.

At the 15th Conference of the Parties (COP-15), held in Copenhagen in December 2009, Israel's president declared that Israel would undertake to reduce the amount of its greenhouse gas (GHG) emissions by 20% by year 2020, relative to "business as usual" (BAU) scenario[2] , intending on reducing the GHG intensity of the economy without mandating economy-wide absolute emission reductions.

Methods

The Israeli government assembled an intergovernmental task force – comprised of Directors General of relevant government ministries and chaired by the Ministry of Finance - to develop a National GHG Emission Mitigation Plan as a means of implementing its 2009 commitment[3]. As policy makers grappled with developing a detailed plan to reduce GHG emissions across all sectors of the economy, it was recognized that the key goals are:

- Evaluate technologies and practices to mitigate GHG emissions,
- Assess the potential contribution of such actions to the national economy, and
- Identify policy measures that will enhance the implementation of the action plan.

Teams, assisted by experts from the Samuel Neaman Institute, working with the intergovernmental task force, proceeded by integrating the assessment of costs of applicable mitigation technologies and potential policies with the benefits expected to accrue from reducing GHG emissions. The assessment addressed issues such as lower national expenditures on electricity purchases, co-benefit of local air pollution reductions and lower infrastructure costs due to reduced energy demand.

The focal points of the assessment were GHG emissions mitigation in several key areas such as: energy efficiency, green buildings, transportation, education and raising awareness over the coming decade. The intergovernmental task force was also called upon to follow up on the implementation of the plan and to review additional policy measures for GHG reductions, including accelerating the introduction of renewable energy into the Israeli power market.

Results

The initial assessment showed that for Israel, the 'business as usual' (BAU) projection for the target year (2020) is expected to reach annual GHG emissions of 109 million metric tonnes of CO2e. Therefore, a national target of 20% GHG emission reduction as compared to BAU would require Israel to reduce 22 million metric tons of CO2e by the year 2020.

In keeping with this target, the plan that emerged by the end of 2010 identified a list of specific actions that were assigned to appropriate ministries, and included applicable budgetary allocations for implementation of these actions[4]. Some notable examples include:

- An estimated investment of 1.2 billion Israeli shekels (ILS) to promote the scrapping of inefficient refrigerators and air conditioners in the household sector in the period of 2011-2020,
- An allocation of 626 million ILS by the Ministry of Environmental Protection in the coming decade to support investments in targeted emission reduction projects in the industrial, commercial and public sectors.
- An investment of 39 million ILS to promote pilot projects for new and existing green buildings, including a

building survey aimed at advancing green building,

- An investment of 46 million ILS in education, information sharing and communication initiatives to increase public awareness and promote behavioral changes aimed at achieving energy conservation,
- An investment of 40 million ILS over the next two years to fund technology incubators that are focused on Israeli 'green technologies' aimed at reducing GHG emissions.

In a parallel effort, Israel launched on July 1, 2010 a pilot initiative for voluntary GHG reporting and registering system[5]. The reporting protocol was prepared by the Ministry of Environmental Protection and by the Samuel Neaman Institute, in cooperation with a wide range of stakeholders. It includes guidelines for mapping, quantifying and reporting GHG in Israel. It is intended to help develop capacities and tools for the private sector and for industry to calculate greenhouse gas emissions and to help estimate the potential for emission reductions. So far, corporations and institutions representing about 60% of Israel's GHG have voluntarily joined this initiative.

Conclusions

Israel has taken a major step forward towards planning for, and initiating the implementation of, measures that are expected to lead to GHG reductions that would benefit its economy. The action plan that has been adopted is expected to lead to reductions of close to 16 million tonnes of CO2e. However, this amount is short by 6 million tonnes of the 22 million tonnes CO2e emission reductions target that was previously declared. It is, therefore, essential to continuously review other actions that could be undertaken, either by mandatory measures and/or through voluntary initiatives, that could help in closing the gap between the targeted and the anticipated GHG emission reductions.

A notable gap in the action plan presented is the issue of fuel switching in the power sector, including the introduction of renewable energy technologies, such as solar and wind, into the local energy market. In 2011 the government of Israel reaffirmed its commitment to a target of 10% electricity generation from renewable sources by 2020, however a myriad of bureaucratic delays and financing difficulties, along with other regional geopolitical events, are jeopardizing attainment of these renewable electricity goals while energy demands are continuing to grow.

The voluntary GHG reporting and registering system is contributing to a better understanding of managing business risks which may arise from these emissions, identifying opportunities for emissions reductions and helping companies to prepare for mandatory reporting and reduction systems in the future.

References

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