

## Chapter 1

### Introduction

Climate change is one of the most difficult environmental challenges humanity is faced with today, and climate scientists around the world have confirmed its significance. Human actions have considerable effects on the world climate. Unless immediate steps are taken to reduce the impact of our actions, such as by cutting greenhouse gas emissions, harsh consequences will follow.

International constitutions are filled with measures, discussions, initiatives and actions to construct a new agreement to replace the Kyoto Protocol. The Kyoto Protocol committed several countries to reduce GHG (Green House Gasses) and will expire in 2012 (See chapter 4C). This issue has received a large amount of attention from both the UN and the EU.



The issue of climate change has been followed by international concern and exposure precisely because it affects all disciplines of life. Financial impacts, in particular, were described in a report by the economist Sir Nicolas Stern (See chapter 3B), who clarified that there is a growing financial need to attend to climate change as soon as possible. Stern's report concludes that reducing GHG emissions now will cost 1% of the world GDP each year, whereas delaying this action would cost an estimated 5% or more.

Israel, which has primarily focused on security, financial and social challenges in the past, is now facing a new challenge in coping with the predicted climate crisis. There are already quite a few symptoms of climate change putting the region and its infrastructure at risk, such as a shortage of sweet water, droughts, fewer residues, rising sea levels that cause aquifer damage, extreme weather systems, increasing air temperatures, flooding, coastal cliff erosion, and much more (See Chapter 3A).

These impacts put a strain on the water situation in Israel and its surrounding regions, which threatens security in an area already afflicted with political tension. Water will be addressed in this report as one of the main reasons pressuring Israel to take action in the wake of a changing climate (See Chapter 3C).

In the Kyoto Protocol, Israel is not included on the ‘developed countries’ list, making it exempt from meeting the GHG emission reduction requirements. However, Israel emits approximately 11 tons of carbon dioxide per capita each year (2004 data). Israeli emissions are at the same level as some of the most developed countries in the world, such as Germany and other European countries. Israel’s GDP also reached a developed country’s level and Israel is aspiring to join the OECD.

Therefore, if a future agreement changes Israel’s category of development, it will have to commit to reduce its GHG emissions. With this in mind, Israel must participate in international discussions with countries of similar economic development, such as Mexico, South Korea and Singapore. These countries have similar development characteristics and must collaborate under UN negotiations (See chapter 4B). If this is the case, then by the end of 2009, Israel will be part of the process leading to the Fifteenth session and Conference of the Parties in Copenhagen, where participating countries are expected to reach a Post-Kyoto agreement. Only by being involved may Israel benefit from such an agreement which could very well serve its own interests.

If it is re-categorized as a developed country, Israel must be prepared to adjust its energy, industrial and transportation sectors for mitigation, as well as contribute to the movement against climate change by cutting GHG emissions. As a developed country, Israel will have to cut emissions to an extent comparable to other countries at similar levels of economic development. Likewise, Israel will be expected to take country-wide actions to promote adaptation to changes in lifestyles, and raise awareness campaigns to help citizens recognize the actual impacts of global warming.

In the middle of a global financial crisis, the impact of climate change is no less dire. For some, the crisis may actually provide additional incentives and opportunities to focus on climate change. In times like these, it is necessary to consider other financial alternatives for economic growth, such as using green technologies or creating “green” jobs and revenue flows alongside energy reduction. As an option, green technologies can allow Israel to implement a green-building initiative both domestically and commercially. If used for trade, Israel can export technologies that may assist other countries to develop their technologies with alternative methods, which will ultimately help cut GHG emissions. By developing and using clean technologies now to fight climate change, long-term consequences can be avoided later.



Source: <http://jurisdynamics.blogspot.com/2006/10/emergent-new-orleans-cybernetic-urban.html>

Israel recently started showing first signs of activity towards a national movement against climate change. The Chief Scientist Bureau for Environment Protection published a paper on “Israel preparing for global climate changes, including impacts on Israel and intermediate action recommendations” (Chapter 7A). The issue was raised at a government assembly and parliament discussed a private bill proposal, though it didn’t pass by the end of the 17<sup>th</sup> Knesset. All the above have yet to be transformed into executable steps. Due to insufficient action taken on the national level, "Forum 15" was established, which consists of 15 major cities combined under the ICLEI program (Cities for Climate Protection) who committed to reducing their greenhouse gas emissions (Chapter 7D).

Now Israel is undergoing a period where tackling climate change requires policy-level promotion, legislative acknowledgement and inclusion of local, national and international initiatives. This report will provide the reader with a holistic understanding of the issue of climate change in Israel and the political and financial processes attached to it. It is hoped that this understanding will penetrate the minds of policy-makers as well and influence all of their decisions.

The following pages will provide much of, but not all, information about climate change. This report concentrates on data, complications, process changes and opportunities of climate change.

Each page presents basic information and an explanation of key terms. Due to the complex systems involved, the report often refers to additional data and sources, as well as external data sources for extensive reading. This information is available online within the FoEME web site:

[www.foeme.org<projects<climate change](http://www.foeme.org/projects/climate%20change)

This report is based on similar work developed and promoted in the USA by the Pew Environment Group, with additions and adjustments relating to Israel and international processes.<sup>1</sup>

*In this report, “global climate change” is used to replace the term “global warming.” Climate change is felt to be a more accurate description as it deals with both cooling and warming process affecting the planet.*

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<sup>1</sup> Pew Environment Group prepared for the 110th Congress, “Global Warming: What You Need to Know.”  
<http://www.pewglobalwarming.org/resources/binder/index.html>.