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# The need for deeds: A call for proactivism in Israel's climate policy

The 'climate crisis' is now the greatest threat to the Planet Earth and to all Humanity. Climate change is not a theoretical, scientific matter — it is happening here and now. Due to its geographical location, the climate crisis is expected to have very extreme ramifications in the State of Israel. Yet, so far, Israel's goals and performances are very limited. In this paper we describe the actions needed to fulfill Israel's modest GHG reduction goals for the benefits of the people of Israel, the world, and future generations.

Keywords:

Climate change - Israel - mitigation - adaptation - Paris Agreement - National Goals - GHG Reduction - Electricity Sector - Transportation Sector - Industrial Sector

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### Introduction

The State of Israel was founded in 1948. As of 2021 the population is approximately 9.4 million people living on 22,000 square kilometres of land. Israel, situated in the Middle East, is a transitional region, between a desert climate and a Mediterranean one; as such, it has a unique variety of biological species and valuable nature. In addition, Israel, being surrounded by neighbouring countries, some of which have undeveloped infrastructures, is, in fact, an island of water, energy and other infrastructures.

Since its establishment, Israel has undergone similar processes to those that have occurred elsewhere in the world, but they happened over a shorter time-period and in a more intensive manner. By the mid-20th century, Israel's local economy was primarily based on commerce and traditional, mechanized agriculture, though heavy industrial processes were not yet being conducted across the country. During the 1960s and 1970s, Israel underwent an accelerated process of development that included an intensive transition to intensive agriculture, industrialization and the construction of many different infrastructures, alongside population growth and rapid urbanization processes.<sup>1</sup> All these, as well as the unsupervised dumping of waste products and sewage, caused – within a relatively short period of time – serious damage to human health, the

environment and biodiversity, due to the pollution of the soil, the air and sources of water and the sea. In order to enable a sustainable progress and economic growth, in 1968, within the framework of Israel's "National Research Council," the "National Committee for Water Quality" was founded, becoming (after two years) the "National Committee for the Biosphere and Environmental Quality." In 1973, the Israel Prime Minister's Office established the "Environmental Protection Service" and, in 1988, the Ministry of Environment was founded, changing its name to Ministry of Environmental Protection (MoEP) in 2006.

Nonetheless, the early environmental legislation in Israel was not well-developed and its enforcement was as lax as the national investment in ecological issues was meagre. During the 1960s, and even more so during the 1970s, civil awareness began to grow regarding the matter of environmental protection. Various environmental organizations were founded in Israel that – over the years – dealt with relevant legislation, enforcement and public struggles. This global and local awakening followed in the wake of the Brundtland Commission's report, published in 1987 by the "World Commission on Environment and Development" and well known for its definition of the term "sustainable development".<sup>2</sup>

The environmental conditions and challenges related to the insufficiency of the natural resources in the tiny country of Israel were, and still are, unique, and often led to the development of innovative, groundbreaking solutions, like new methods for water desalination and sewage treatments, as well as novel drip-irrigation and forestry techniques.<sup>3</sup> Similarly, in order to reduce the need to import energy sources for the production of electricity and to better utilize existing natural resources, the sunny State of Israel also pioneered the field of solar energy, including a mandatory placement of solar water-heaters on rooftops back in 1980.

This document summarizes the goals of the Government of Israel in regard to the reduction of Israel's carbon footprint and presents data and recommendations that have previously been submitted to various Israeli Government Ministries, national authorities and also to research bodies and other relevant private and public organizations, for the purpose of promoting policies for sustainable development and climate remediation in Israel over the upcoming decades.

### **The Global Climate Crisis**

The 'climate crisis', referring to the frequent and extreme climatic changes happening on Earth these past few decades, is now the greatest threat to the Planet Earth and to all Humanity.<sup>4</sup> Its effects are clear and tangible. Already today, the destructive impact of extreme climatic events on both the natural environment and Humanity caused by rising temperature is unmistakable: heat and cold waves; melting glaciers; rising sea levels; floods and mudslides; droughts as well as damages to agricultural crops and more.

To cope with this crisis and to prevent a further rise in the average temperature caused by the accelerated emission of greenhouse gases (GHGs) produced by human processes, a wide range of local and global actions have been taken in the recent years and innovative technologies to reduce the release of GHGs or, contrarily, to intentionally capture and store GHGs have been developed.

In 2015 the U.N.'s "Paris Climate Agreement" was adopted<sup>5</sup> in order to establish quantitative goals for the reduced emission of GHGs and the allocation of means for the funding of the required actions to that end. The Agreement set a goal to limit the increase in world temperature to 1.5°-2° C by the end of the century, compared to the period before the Industrial Revolution – rather than suffering the predicted 4.5° C rise, if a 'business as usual' approach is taken. In fact, this would mean that it is necessary to reduce about 50% of all GHG emissions by the year 2030, relative to the levels in 2010. Furthermore, a recently published comprehensive report<sup>6</sup> by the U.N.'s Intergovernmental Panel on Climate Change (IPCC) stated unequivocally that not only is Humanity responsible for causing the climate crisis, but that it also has far-reaching ramifications on the Earth's atmosphere, hydrosphere and biosphere, as well as on daily socioeconomic factors. This report added that, in the next few decades, we should already expect a 1.5° C rise in temperature and that the many changes occurring in the oceans and on land may not be prevented and will become irreversible for many hundreds or thousands of years. Therefore, it is necessary to unite all the global efforts to reduce GHG emissions and to moderate global warming post-haste.

Beyond the significant impact of the climate crisis on the natural environment, it also produces long-range social and economic effects. Climate change causes deaths, the spread of diseases, damage to property as well as conflicts over natural resources and the migration of refugees and more. The climate crisis influences economic parameters, such as the prices of goods, trade agreements, economic performances, competitive national economies and inequality. Over the past few years, more than 120 countries have presented their plans for the promotion of a zero-carbon economy by the year 2050. These plans include enormous investments in new infrastructures for energy, transportation, agriculture and in the employment sector and more, alongside regulation and legislation, such as enacting a "Climate Law" and/or the imposition of a 'Carbon Tax', as well as the

innovative development of climatic and environmental technologies.

### The Climate Crisis and the State of Israel

Due to its geographical location the climate crisis is expected to have extreme ramifications in the State of Israel. According to the Israel Meteorological Service, “the average temperature in Israel has risen by about 1.4° C over the period from 1950 to 2017 and is expected to increase by a few more degrees by the year 2050, with this rise in temperature being especially blatant during the summer seasons.”<sup>7</sup> Moreover: “It seems that in the worst case scenario, the average temperature in Israel is expected to rise another 4° C by the end of this century... Apparently, the summer’s low temperatures will rise by 5° C, assuming the worst scenario.”<sup>8</sup> All this will lead to the ongoing decline of precipitation and a shortening of the rainy season. Furthermore, the warming of the Mediterranean Sea (forecast for +2.97 °C by 2070)<sup>9</sup> will add. According to another report by a network of Mediterranean Sea climatic and environmental experts, the water temperature in the Eastern Basin is rising at a quicker pace and will increase by another 3° C by the end of the century, at the very least – if not sooner.<sup>10</sup> These data oblige the State of Israel to prepare for changes and to develop plans for adaptation on the national and local governmental levels. They will have to plan their mobilizations for scenarios including flooding, fires, heat and cold waves, urban heat islands, etc.<sup>11</sup>

As recorded by the Israel Central Bureau of Statistics (CBS), in 2016 (the most recent year for which the CBS has provided official data on GHG emissions), the absolute GHG emissions from the State of Israel were 79,951 thousand tons, relatively low compared to other countries. Yet, the emissions *per capita* in Israel were relatively higher than those measured in most of the European countries. While OECD countries reduce their absolute GHG emissions, Israel has failed to honour its modest pledges.<sup>12</sup> As will be discussed later, Israel has pledged to reduce its GHG on a *per*

*capita* basis, which is likely to increase the total emissions, as the population grows.

Indeed, since the discovery of natural gas (NG) off the coast of Israel in 2009, the State pinned all its hopes on the transition to the use of NG, defined the world-over as being a temporary, transitional fuel source, for use in producing electricity, mobile transportation and other industries – a process that actually only postpones progress and the application of a real transition to renewable energies, especially solar energy in the case of Israel. Note that a reduction in GHG emissions related to energy in the national economy will not hinder Israel’s long-term growth goals – on the contrary, it will produce both direct and indirect benefits, such as the reduction of air pollution, increased energy efficiency and an increase in jobs. Thus, the reduction of GHG emissions may bring a real increase in Israel’s gross domestic product (GDP) and improved social welfare.<sup>13</sup>

Climate change is also a **security threat** to the State of Israel. According to a report by the Institute for National Security Research, the most significant risks to Israel’s national security will be outcomes of climatic changes, like rising temperatures, reduced precipitation and the rising sea levels that will be experienced by neighbouring countries less fortified and less prepared for these changes. Especially weak and divided states, lacking suitable means for coping with such climatic trends will be adversely affected,<sup>14</sup> and will add to existing tensions regarding ethnic, social and economic conditions, particularly when living under unstable regimes. Therefore, climate crisis is a crucial factor for any national security agenda and preparedness actions.

### National goals for emission reduction

The State of Israel is small and crowded. Recently, a special report provided a peek at the way in which the State of Israel will probably look in the year 2050.<sup>15</sup> The forecast is that 18 million citizens, crowded high-rise and underground urban construction, and a significantly different Israeli social structure

will characterize the State. Additionally, it is important to note that Israel's economic performances have ranked the country in line with the world's developed states, but that it also shares many demographic and social characteristics with developing countries, including high population growth.

Although the State of Israel had pledged that it would reduce its GHG emissions within various international frameworks even before the "Paris Climate Agreement," signing that Agreement meant committing to begin reducing them immediately, as ratified by the Israeli Government in September 2015.<sup>16</sup> The goals that were approved are:

1. By 2025, the emission of GHG *per capita* should not exceed 8.8 tons; by 2030 – 7.7 tons *per capita*; that is to say, a reduction of 26% of GHG *per capita*, compared to 2005.
  2. A reduction of at least 17% in the consumption of electricity by 2030, as opposed to the anticipated consumption for that same year, if a 'business as usual' approach is taken until then.
  3. The production of electricity from renewable resources would be 13% of the total production of electricity by 2025, and 17% or less of the total consumption of electricity by 2030.
  4. A reduction of 20% in private mileage by 2030, in lieu of the expected private mileage for that same year, if a 'business as usual' approach is taken until then.
1. The State of Israel recognizes the importance of reaching the goal of zero GHG emissions by 2050, in accordance with the "Paris Agreement," and accepts its international obligation to prevent the crossing of the global warming tipping point – 1.5° C. Going forward, the Government would, from time to time, reassess the reduction goals it had set itself in this decision.
  2. The national goal to reduce GHG by 2030 should be regularly updated, such that the annual GHG emissions in 2030 will be at least 27% less than it was in 2015, when the amount was about 79 million tons.
  3. A national goal should be set for the reduction of GHG emission by at least 85% less than it was in 2015 in the year 2050. In line with the above, the annual GHG emissions in 2050 should only be about 12 million tons.

By the end of 2020, the Israeli Government approved the increased production of electricity from renewable resources until 2030, from 17% to 30%.<sup>17</sup> However, it is worth noting that, once again, Israel did not even meet its prior, much lower, renewable-energy goals. In 2020, electricity produced in Israel from renewable resources, primarily from solar energy, was only 6%.<sup>18</sup> Likewise, in July 2021, as part of the "Paris Climate Agreement," the Israeli Government ratified a national, low-carbon, economic programme with long-term goals, as follows:<sup>19</sup>

To attain those national goals, Israel determined sectorial goals for the reduction of GHG emissions and strove to make energy use more efficient, as detailed below. It was also attested that earmarked budgets have been allotted for 2021-2022. Within the parameters of this proposed budget, the MoEP was granted the sum of 625 million NIS (New Israeli Shekels, 3.8 NIS per 1 Euro) towards the preparation of a plan for the combating the climate crisis.<sup>20</sup> Meanwhile, the Energy Ministry was awarded an unprecedented investment of over 2 billion NIS for the coming decade, for the benefit of plans to become more energy efficient, to develop self-sustaining energies and to switch to the use of 'green' energy; this, in addition to 700 million NIS for energy-efficiency grants, 130 million NIS for establishing the Joint Energy Institute (together with academic institutions), and 100 million NIS with the application of the programme to prepare local authorities for climatic changes.<sup>21</sup>

Notice that all these governmental decisions above are not anchored by legislation and their budgets have not yet been ratified.

## Actions needed

The following sections will describe the actions needed to fulfil Israel's modest GHG reduction goals.

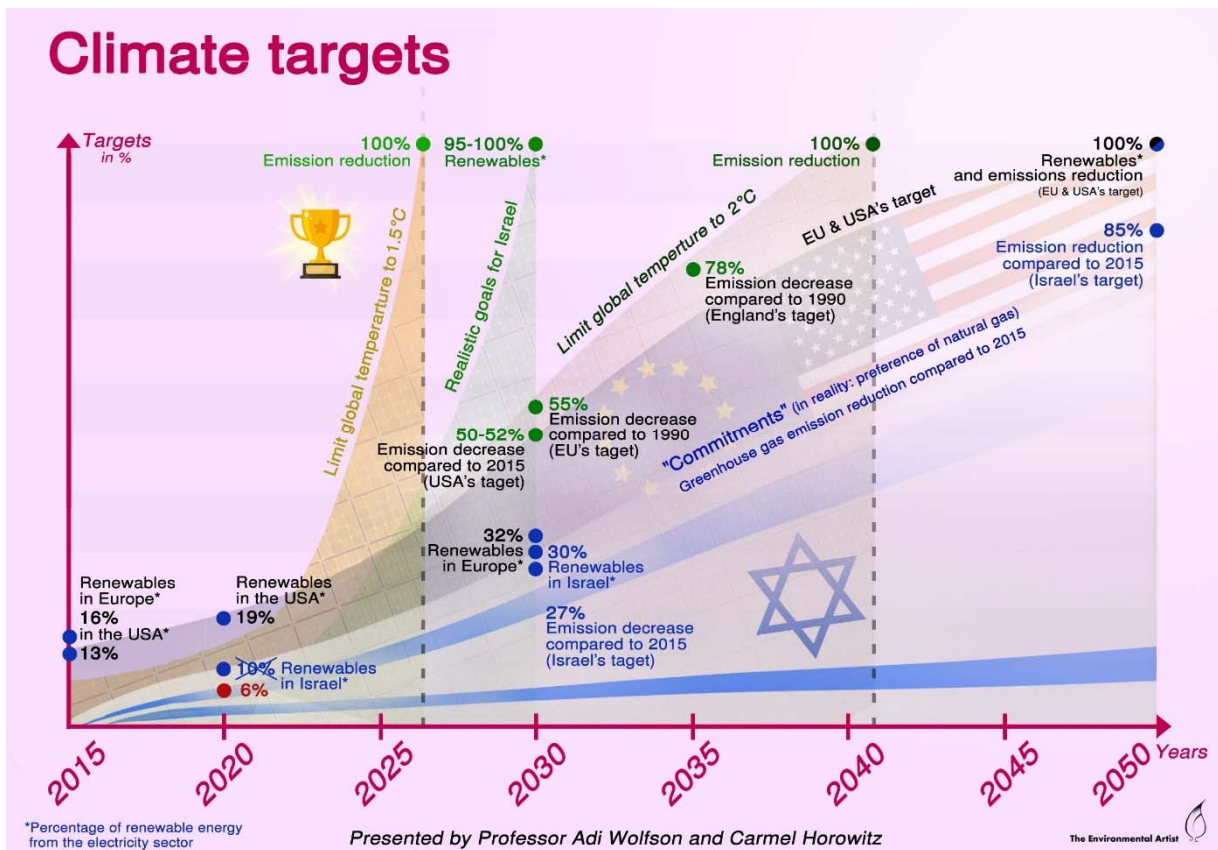
### A. The electricity sector

Goals set by the Government: Reduction of GHGs originating from the production of electricity before the year 2050 by at least 85%, as compared to what was measured in 2015, which was 37.4 million tons. To that end, Israel's Energy Ministry must evaluate the current energy mix being used to produce energy and then determine the renewable-energy goals for 2050, while insuring an attainable, reliable and self-sustaining national energy economy.<sup>22</sup> The production of electricity from fossil fuels (coal, petroleum and NG) is the primary cause of GHG emissions in Israel, starting from the process of extracting these fuels and through to their combustion.

The needed deeds: Over the last years, the Government of Israel has started a rapid tran-

sition from the use of coal and diesel oil to produce electricity to the use of NG, planned for completion by 2025. This transition to NG has many advantages, the greatest of which is the reduction in air pollution and the increased energy efficiency of the electric power plants. However, the very process of extracting this methane gas, an aggressive, toxic GHG, release pollutants into the sea and air. It has become clear that the uncontrolled emissions and leaks of the NG itself, throughout its entire supply route, during its separation and transport, contribute significantly to global warming.<sup>6</sup>

This being the case, the transition to renewable energy sources becomes a central goal in the reduction of GHG emissions, alongside the reduction of many air pollutants. In sunny Israel, the dominant renewable energy source is solar energy, the production of which requires space and complementary energy-storing batteries for the night hours and winter seasons. Moreover, due to Israel's relatively small size, dense population



and the value of its open spaces and biodiversity, it is preferable to produce solar energy atop buildings and to opt for dual use of agricultural land, water reservoirs and other areas of land.

In addition, it is obvious today that the energy-storage technologies are ready and that the production cost per kilowatt/hour of electricity from solar field arrays of photovoltaic cells is lower than that of a kilowatt/hour of electricity produced by NG.

Furthermore, one of the most effective ways to reduce energy consumption in general, and GHG emissions in particular, is by the wise use of energy. Decreasing energy consumption may be achieved by improving the energy efficiency in private and public buildings and in public and industrial areas. Energy efficiency contributes to lowering costs, to improving the quality of life and to the reduction of pollution of the air and of water sources. Ultimately, relevant regional cooperation with Jordan, Egypt and the Palestinian Authority, will enable a more efficient and sustainable production of solar energy, while strengthening international relations.<sup>23</sup>

## **B. The transportation sector**

*Goals set by the Government:* Reduction of GHG emissions originating from transportation before the year 2050 by at least 96%, as compared to what was measured in 2015, which was 17.6 million tons; stopping the increase of GHG emissions from transportation by 2030, so that the emission rate stays at 3.3%, relative to what was measured in 2015; limitation of the GHG emissions permitted from new vehicles weighing up to 3.5 tons, registered as of Jan. 1, 2030, to an amount equal to no more than 5% of the average GHG emission for new cars weighing up to 3.5 tons, registered in the year 2020. As of 2026, all newly purchased urban buses must be clean vehicles.

*The needed deeds:* Mobility and traffic are key characteristics of modern society that provide many advantages, both social and economic. The transportation sector is another of the main sources of GHG emissions in the Israeli

national economy, responsible for 40% of the national energy consumption, most of which is still based on polluting fuels.<sup>24</sup> As such, a reduction of private mileage must be attained by the promotion of public transportation, bicycle paths and pedestrian walkways, as well as the provision of mechanisms for joint and cooperative ridesharing, alongside the transition to electric transportation (trains, buses, trucks and private vehicles), and appropriate municipal planning for pedestrian and alternative mobility – all of which should lead to significant reduction in GHG emissions and the air pollution associated with this sector. Investment in public and alternative transportation should also increase accessibility and mobility within the national economy and equality in employment.

In 2016, the Government presented another national plan for alternative fuels, the purpose of which is to decrease the use of petroleum in Israeli transportation by 60% before 2025, with the support of ‘green’ technologies, especially the transition to electric transportation.<sup>25</sup> In 2019, a national-strategic plan was published “for sustainable movement in urban space” – ‘movement’, including public transportation, walking, bicycling and motorized biking, dealing primarily with the search for efficient solutions for ‘the last kilometre’ in large cities and in general. This programme set its goal – that 40% of all travel within metropolitan areas should be on means of public transportation.<sup>26</sup> In another report on the goals of the national energy economy for the year 2030, it was stated that, as of 2030, vehicles fuelled by gasoline or diesel oil will be banned from entering Israel –all those for private vehicles will be entirely banned; heavier vehicles, primarily (commercial) trucks weighing up to 5.3 tons and buses, while heavier vehicles, over 5.3 tons category, will be run on compressed NG (CNG).<sup>27</sup>

Ultimately, it is important to note that this discussion should be expanded beyond the scope of transportation alone and should consider all manner of movement; that is, mobility and accessibility in the broadest sense and their impact on social and environmental jus-

tice. It is necessary to make certain that the above plans are both budgeted and executed. The benefits of their actualizations surpass their costs tenfold (e.g., the decrease in national expenditures spent on fighting air pollution, traffic accidents, time wasted in traffic jams, etc.).<sup>28</sup>

### C. Food and wastes

*Goals set by the Government:* A 71% reduction in the quantity of municipal waste land-filled by the year 2030, as compared to the amount in 2018, which was 4.5 million tons. A 47% reduction of GHG emissions originating from solid waste by 2030, at least when compared to the emissions measured in 2015, which were 5.5 million tons. And a 92% reduction of GHG emissions originating from municipal waste by 2050, at least when compared to the emissions measured in 2015, which were 5.5 million tons.

*The needed deeds:* The agricultural sector is responsible for approximately 20% of all Humanity's GHG emissions. The production of food is a process rich in resources and rife with energy consumption. Agricultural and farming activities not only release carbon dioxide (through various uses of energy), but also methane (originating from ruminant livestock – the major emitters of methane) and also nitrous oxide, emitted by fertilizers and from over-tilled soil (1.5% of the total GHG emissions recorded in 2016 in Israel). To date, Israel has not yet established specific goals for the reduction of agricultural/farming GHG emissions – neither for the crops, nor for the livestock. In fact, according to a national report, 35% of all the food produced in Israel is wasted and 6% of Israel's GHG emissions are due to food loss.<sup>29</sup> Nonetheless, Israel does not have a national plan in place to reduce consumption, in general, nor the waste of food, in particular. A CBS report states that the dumping and burial of wastes contributes 7% of all the GHG emissions in Israel.<sup>30</sup> A sustainable waste treatment policy is a crucial stage in the efforts to reduce Israel's GHG emissions causing climate change. Recently, the Ministry of Environmental Protection pre-

sented a strategic programme for the management of wastes in Israel.<sup>31</sup> Its main goal is to reduce the volume of waste in landfills from 80% to about 20% by 2030. This plan is based on the 'circular economy principle' and on the 'waste hierarchy', that focuses on reuse and recycling, rather than the disposal of waste products at landfills. As such, this programme presented goals focusing on the treatment of those waste components that produce the greatest amounts of GHG emissions, like organic wastes, biological decomposition and more. By treating organic waste in dedicated containers, where they undergo anaerobic digestion and/or by collecting the methane emitted from landfills and biomass digesters – what was once wasted can be recycled and reused as a renewable energy source.

### D. The industrial sector

*Goal set by the Government:* To reduce the GHG emissions from the industrial sector by 56% before 2050, at least in comparison with the parallel emissions recorded in 2015, which were at 12 million tons.

*The needed deeds:* Most of the GHG emissions resulting from industrial processes are emissions from the production of energy or electricity by burning fossil fuels. In addition, during various industrial processes, such as cement or fertilizer production, chemicals are involved which may be released into the air, among them GHGs. The transition to the use of renewable energy and the installation of hermetically sealed infrastructures to supply NG to the heavy industrial plants may help to significantly reduce these GHG emissions.

### Complementary tools for promoting national climate policy

Besides the aforementioned reduction goals and the various plans for the relevant sectors, in order to meet the planned goals for a low-carbon economy, it is necessary to combine these programmes with the use of certain complementary tools, such as the ratification of a "Climate Law," enforcement of the costs of carbon, the promotion of regional coopera-



tion in the areas of energy production, water resource management and the development of environmental and climatic technological innovations, alongside a national programme for the socioeconomic adaptation to all these significant changes.

### A. “Climate Law”

A “Climate Law” should function as a framework for short-, medium- and long-term policy making and coping with the climate crisis, by providing a stable and permanent legal basis for the goals presented to all the governmental ministries, that obligates the Israel’s Government to formulate a perennial, national programme for the reduction of GHG emissions and to make suitable preparations for the climate crisis, under ongoing independent supervision and oversight. Note that the execution of such a law requires cooperation and agreements between all the sectors in the Government’s national economy, local authorities, the industrial and business sectors and, naturally, civil society. In recent publications, it was stated that there are five key components to successful climatic legislation: 1) the definition of clear goals; 2) the design of the steps and policies; 3) monitoring the progress; 4) defining institutional responsibility; and 5) encouragement of public participation. In addition, note that a portion of the climatic legislation must be specifically related to the issue of socioeconomic adaptation to all the required changes.<sup>32</sup>

### B. Carbon tax

The accepted macroeconomic approach for assessing the benefits of the struggle against global warming equates the costs incurred by reducing the warming trend (in terms of decreased GDP and present welfare) with the costs involved in decreasing GDP and future welfare under increasing global warming. A research team at the Bank of Israel noted that the placement of a price-tag on carbon use was meant to remedy a significant market failure, caused when the polluter is not obliged to pay for emitting GHGs. Taxing carbon usage is thought to be the most efficient

means for promoting reduction in GHG emissions and creating certainty in the economic markets. Various calculations indicate that, in this case, adopting an ambitious policy may reduce the emissions in Israel by 92% before 2050, as compared to the data from 2005.<sup>13</sup> However, complementary steps must be taken to provide easements to those groups that will carry the burden of this ‘carbon tax’. In fact, note that when a ‘carbon tax’ is imposed, it is usually on the fossil fuels. As such, to gain maximal benefit from carbon taxation, especially when the taxes on fuels are already very high in Israel – all the sources of GHG emissions should be taxed, e.g. food production, waste landfills, airline flights and so forth.

### C. A National Adaptation Plan

Due to the high sensitivity and vulnerability of Israel and its cities to climate changes, in 2017, a “National Strategy and Action Plan” was prepared for dealing with climate changes.<sup>33</sup> This plan includes recommendations to the Israel Government regarding national strategies and operations in the various economic sectors – aimed at preparing for and coping with climate change and extreme weather events that occur in our region or are foreseen. This plan delineates five operative goals, provides detailed action plans for attaining each of those goals and addresses them to the relevant governmental ministries and offices, e.g. health, education, security, construction etc. The primary goal of this plan is to reduce the amount of human harm and property damage, while building economic fortitude, by way of monitoring cases of morbidity and mortality and caring for high-risk groups; implementing the master plan for national water management; making appropriate preparations in the sectors of energy production and supply, construction and tourism; preparing for the prevent of forest fires and firefighting; protecting Israel’s biodiversity, unique habitats and ecosystems; increasing our scientific knowledge, so that it may serve as a basis for decision making; informing and education the general public; and so on. Pursuant to the above goals, in 2018, an

Inter-ministerial Administration for Climate Change Adaptation was established, but so far, no funds were allocated for its actions.

#### **D. Innovation and entrepreneurship**

The State of Israel is frequently perceived as being a 'start-up nation' with its Israeli *hutzpah* (i.e. raw gumption), local entrepreneurship and ability to develop, promote and export technologies. Adjacent to the Israeli branch of high-tech, recent years have seen the sprouting of additional branches, such as cleantech, biotech, foodtech and agrotech.<sup>34</sup> Despite the large risks imposed by the climate crisis, it also presents many possibilities and opportunities for more development and commercialization of such technologies. National investment in the development of solutions and technologies for the reduction of GHG emissions and in ways of dealing with the climate crisis will place the State of Israel at the scientific and technological forefront of battle against this crisis. Recently, the Israel Innovation Authority, together with the Ministry of Environmental Protection, set up a special support programme, offering funding for pilot programmes that deal with environmental protection, climate change, renewal energy, smart transportation, marine environmental protection and more. Similarly, the Energy Ministry was granted 130 million NIS budget for 2021-2022, for the purpose of establishing a Joint Energy Institute, together with academic institutions.

#### **E. International cooperation**

In a globalized world under real crisis, there is special significance to cooperation between different countries. While the Kingdom of Jordan, one of Israel's adjacent neighbours, has large areas of available land that may be used for the installation of arrays of solar panels, it suffers from chronic water shortage. Meanwhile, Israel, that suffers from a dire shortage of available open land, has advanced desalination technology and access to the Mediterranean Sea. It is easy to see how these two neighbouring countries may fill each other's needs. In fact, Israel's Ministry of

Energy is currently considering laying an submarine cable, that would run to Cyprus and on to Europe.<sup>35</sup> It might enable support of the isolated Israeli electrical grid and the importing of renewable energy from countries at other longitudes, where the sun shines at different hours than in Israel and who have developed wind energy and hydroelectricity. Several cooperative agreements were made in with other countries in the region, for example, the "2020 Abraham Accord" with the United Arab Emirates,<sup>36</sup> that may promote the mutual supply of renewable energy and environmental technologies, as well as joint innovation. Furthermore, the diplomatic relations between Israel and the UAE would certainly benefit by the strengthening of economic ties.

#### **Summary**

The greatest challenge to Humanity today is the climate crisis. However, though it poses a significant threat to Israel, to date, it is not yet located in the crosshairs of Israel's domestic and foreign policies. Nevertheless, over the past few months, in light of the changes in Israeli politics and with the new US Biden Government and the European Union's announcement of instigating a 'carbon border tax', and in view of Israel's commitment to the "Paris Climate Accord" – the Government of Israel has decided to promote a national, low-carbon, economic plan, including the goal to significantly reduce GHG emissions and the provision of earmarked budgets to that end for the relevant sectors (production of electricity, transportation etc.). With the advent of the "Climate Law," carbon taxation and the execution of the "National Strategy and Action Plan," all of these may provide new and unique opportunities for Israel in the arena of development and/or the transition of technologies and the development of skills relevant to sustainability.

It is time to act, quickly, robustly and resolutely, for the benefits of the people of Israel, the world and future generations.

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