



# NZO

## **Practical Steps to accelerate the energy transition**

### **Part 3: Dealing with Challenges and Obstacles**

**February, 2023**





## Executive Summary - Practical Steps to Accelerate the Energy Transition in Israel

This document includes an aggregation of concrete and practical steps whose implementation will enable the acceleration of Israel's transition toward a renewable energy-based low-carbon economy. The recommendations offered herein correspond to the state of the electricity sector at large, and renewable energies in particular, as of the end of 2022. Some of the recommendations and proposed measures are intended to be implemented within the immediate time frame. Others are cornerstones for the long-term development of the economy.

In 2022, the Israeli government decided that it would reduce greenhouse gas emissions by 27% by the year 2030, within the framework of which a goal was set to reduce emissions by 30% in the electricity sector.<sup>1</sup> This decision reaffirmed the goal of 30% renewable energies by 2030 – that is, for approximately 30% of electricity in Israel to be produced by renewable energy.<sup>2</sup>

Yet, were it not enough that the government's new goal is lower than that necessary for us to do our part in reducing greenhouse gas emissions per the guidelines put forth by the Intergovernmental Panel on Climate Change (IPCC), Israel has persistently lagged behind in the implementation of Government Decisions on renewable energy, only having reached the low target set for the year 2020 two years later, in 2022.<sup>3</sup>

The slow progress in renewable energy production raises concerns that a genuine commitment toward a transition to a low-emissions economy and maximization of Israel's solar potential is lacking. This remains the case while the electricity sector continues to be based on fossil fuels in practice, and primarily by natural gas.

This document aggregates comprehensive recommendations for necessary changes in the electricity market, considering both a broad perspective that includes fundamental principles in the transition to renewable energies, and practical steps for effective implementation on the ground.

In Chapter One we review the fruits of our labor via research in policy papers, articles, and various documents published by the NZO team. Through such research and publications, we

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<sup>1</sup> [Government Decision 1282](#), National Plan for the Prevention and Reduction of Pollution and Greenhouse Gas Emissions, May 2022.

<sup>2</sup> [Government Decision 465](#), October 2020.

<sup>3</sup> [Government Decision 3484](#), July 2011, sets a goal of 10% for electric renewable energy production among all electricity production in Israel in 2020.



indicate that generation of all the electricity consumed in Israel, or nearly all of it – approximately 95% – from renewable sources, is both a possible and attainable goal.<sup>4</sup>

In Chapter Two, the current status of the field of renewable energy in Israel is presented as of the end of 2022.

In Chapter Three, we outline fundamental principles in transitioning to a renewable energy-based electricity economy.

In Chapter Four we detail the immediate steps that we believe the State of Israel must take to implement this transition.

Taking these steps, which should be both viewed in and of themselves, while also as indicative of a complete, coherent concept, will accelerate the transition to renewable energies and reduce greenhouse gas emissions in Israel. Thus, the State of Israel will come closer to the achievements of the world's most advanced countries in the field<sup>5</sup> and to the goal set by the IPCC, to reduce at least 45% of greenhouse gas emissions by the year 2030.

There has long been a consensus in sweeping agreement, regarding the dangers of global warming and an ecological climate crisis. Yet the failure of governments and public leaders to adequately address the implications that arise from this consensus, is what shapes humanity's response to this challenge more than anything else. This failure is sometimes masked under the notion that “nothing can be done,” per which the achievement of goals set by scientists for the reduction of greenhouse gas emissions is not possible.

Even in Israel, some claim that the modest – too modest – goals set by the government are beyond our reach. This work should thus be read as a declaration that this is not the case! The transition toward renewable energy in Israel may be accelerated. Adoption of the measures proposed in this work, based on the perception of the climate crisis as a national challenge, will enable the achievement of ambitious goals in the transition to renewable energies.

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<sup>4</sup> The NZO program was carried out on the basis of conservative assumptions, through sole use of existing and available technologies. Future integration of new technologies will enable the attainment of 100% renewable energy, likely at a lower cost than the estimates made in the model.

<sup>5</sup> See for example: [Denmark](#) – 67% of electricity production comes from renewable energy; [Sweden](#) – over 60%; [New Zealand](#) – over 80%.