



# Israel Sustainability Outlook 2030



# Executive Summary

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The purpose of “Israel Sustainability Outlook 2030” is to bring to the attention of decision-makers the implications of present and anticipated social-economic-environmental trends, formulate a realistic vision of sustainability to which Israel should aspire, identify the gaps between existing trends and the possibility of realizing the vision and identify road maps which could lead towards a sustainable future. **Outlook 2030 proposes a conceptual framework for long-term strategy and the means for its implementation.**

Outlook 2030 was a joint initiative of the Ministry of Environmental Protection and the Environmental Policy Center at the Jerusalem Institute for Israel Studies and was conducted over the years 2010-2012. The project included experts from a wide range of fields – economy, society, public policy, planning, ecology, energy and water – all of whom contributed their knowledge, individually and jointly, to building the Outlook.

The initiative to prepare Sustainability Outlook 2030 was based on the understanding that Israel’s environmental future needs to be guided by coherent and long-term public policy.

We hope that the outcomes of the project will provide a common agenda for stakeholders and will be adopted by them in the context of long-term strategic thinking, and that it will provide a framework for cooperation and consensus-building between sectors, in order to build together a sustainable future.

A look at the global and national environmental agenda indicates that present policy is not capable of confronting anticipated challenges.

Current environmental policy should result in improved environmental performance and the abatement of negative impacts of economic activity on the environment; but trends of population

growth and rising standards of living are generating ever-increasing pressures on the environment and intensifying the depletion of natural resources and the rate of environmental degradation.

Policy is usually formulated in response to immediate needs and crises on individual issues in an attempt to find solutions with instant results. However, changing trends requires a policy based on an integrated approach capable of generating long-term transformation. Significant change in the state of the environment will require making the connections between the variables that influence the environmental agenda and the driving forces that determine the economy on all levels, from the national level to the individual consumer. A radical structural change is needed as opposed to incremental improvements of the current situation.<sup>1</sup>

The high level of uncertainty concerning what lies ahead in the future does not enable models to predict or anticipate accurately what is likely to occur. Sudden processes such as economic crises, social instability, political changes or extreme events (earthquakes, fires, and so on) can cause dramatic changes – as we have witnessed numerous times just over the last decade. Other processes are slow but steady and their trends can be foreseen.

Sustainability was defined in Outlook 2030 as the interrelationship between three goals, **the environment, wellbeing and resilience**. This definition is a little different from the usual sustainability triad that includes environment, society and economy. The Outlook 2030 team<sup>2</sup> decided to put wellbeing at the center of the discussion, while economic activity

<sup>1</sup> OECD, Outlook 2050, 2012.

<sup>2</sup> The project staff included many experts from diverse fields of knowledge who participated in different stages of the project. Together they developed indexes and scenarios, wrote opinions, and created policy tool packages.

was defined as being the most significant element that influences the achievement of sustainability but is not its main goal. Other driving forces affecting sustainability are social, geopolitical, cultural and behavioral, and issues relating to governance.

The goal of strengthening social and environmental resilience was added to the sustainability triangle because it constitutes a necessary and complementary variable in a world of high levels of risk and uncertainty. An increase of resilience would be characterized by boosting the capacity to contend with crisis situations, identifying the extent of risk distribution, reducing the intensity of anticipated damages, increasing the capacity of a community to cope with risk and crisis situations and use them as opportunities for change.

## Past, present and future trends

The trends observed in Israel over the last 20 years indicate that a “business as usual” scenario, based on the continuation of present policies and trends, would not lead to a sustainable environment (ecological systems), to wellbeing or to their resilience.

**Demography:** Israel’s population is expected to grow to 11 million by 2030, both as a result of natural growth and as a result of the expected rise in life expectancy, which will reach an average of 86 years. The phenomenon of household split, along with the co-existence of four generations, means that three separate households per family will exist in parallel. The direct significance of these demographic trends is an increase in the demand for natural resources, consumer products and services.

**Economy:** World economic activity is expected to double by 2030. The Israeli economy grew in the last decade by 20% and since the 1990s by 75% and has proven resistant to crises. If there is no change in current trends, the Israeli economy is expected to develop in line with global markets. A rise in per capita GDP is expected to be reflected in a rise

in disposable income and an increase in purchasing power and the intensification of the impacts of household consumption on the environment.

**Dependence on global trade:** The economy and global trade were identified as the most important driving forces that impact on the environment in Israel. The Israeli economy transformed from local production to foreign trade, which currently constitutes 61% of the GDP. This trend can be expected to continue in the future. The transition to foreign trade has positive impacts on reducing environmental burdens in Israel because of the transfer of manufacturing to Asia, the export of services rather than goods, the transition to the import of services and finished products and the strict regulation Israel has to meet in order to export to global markets.

**Dependence on import:** The transfer of manufacturing processes to other countries and their replacement with the import of products such as water (embedded in food), food, energy and raw materials for industry reduces environmental pressures within the country. On the other hand, the transition to foreign trade raises the level of Israel’s dependence on the import of food products and raw materials for industry and therefore intensifies its exposure to risks.

**Income disparities:** The general rise of GDP does not reflect the polarization between different social strata. The Gini index and the per capita disposable income level reveal a grim picture of the widening of gaps in Israeli society. The disparity in per capita disposable income (after expenditure on food) is increasing between the top and bottom deciles, with a small improvement in the level of the lowest decile. Improvement in Israel’s economic situation will not be reflected in an improvement of wellbeing, mainly because of the worsening socio-economic disparities.

**Purchasing power disparities:** The increase in disposable income after expenditure for food is

expected to lead to a rise in per capita consumption. There is currently a 25-fold disparity in per capita disposable income between the top and bottom deciles. This disparity leads to a concentration of the purchasing power and consumption pressures in the hands of a small segment of the population and therefore it can be concluded that the main pressures on the environment can be attributed to the consumption patterns of the upper socioeconomic strata. Assuming present trends continue, the top deciles (8-10) of households will be responsible for some 47% of the pressures on the environment. Emulation of a similar lifestyle by lower deciles as disposable income rises will improve standards of living but will significantly increase pressures on the environment.

**Pressures on the environment:** An increase in pressures on the environment together with present uses of natural capital present risks of irreversible harm to the quality and quantity of ecological systems and their services.

**Land resources:** One of the critical elements of natural capital is land as a resource. Current development trends, generating sprawl and the loss of open landscape, are not sustainable. Present trends indicate that 79% of the population increase by 2030 will be absorbed by high-density urban development but 11% of the population increase will be absorbed by rural regional councils in low-density development, with a loss of as much open landscape as that required for the urban development. One reason for this phenomenon is that the price of land does not include externalities and therefore encourages the expansion of the built-up area instead of promoting urban renewal. The opportunity to increase the efficient use of land as well as to reduce the level of energy use by reducing distance travelled is being lost.

**Summary:** A review of past and present trends indicates, on the one hand, an expected improvement in the management of hazards and pollutants, but, on the other hand, signals an expected deterioration of

the environment as a result of increasing pressures of consumption. These processes will compromise the natural resources available to future generations.

## Future scenarios

Scenario building was chosen to anticipate possible future situations in a context of high uncertainty. The scenarios are different possibilities that may or may not materialize. An examination of the social, economic and environmental trends and processes over the last 20 years constituted the basis for creating the scenario that presumes the continuation of present trends. This is the “business as usual” option. The team of experts developed six other scenarios that are differentiated from one another by variables with a high level of uncertainty, such as the market economy, the geopolitical context, the bureaucratic-institutional framework, the economic-political ideology and resilience to crises.

The scenarios were classified into four main groups by the degree of dominance of various mechanisms. One group includes scenarios in which the market mechanism is particularly dominant; in another group the social mechanism is dominant; the third group includes scenarios where the mechanism of state intervention is dominant; and in the fourth group it is the geopolitical mechanism that is dominant.

### Three scenarios presume a neoliberal ideology and market superiority

- ♦ **The “business as usual” scenario** – market dominance: An emphasis on markets and growth; continued population growth and current consumption patterns; reaction to short-term problems; development of a city-state; absence of an integrated vision; focus on local conflicts; the Israeli-Arab conflict continues to play a central role on the agenda; degradation and fragmentation of ecological systems (in fact, marginal attention is given to the environment).

- ♦ **Unregulated market scenario** – A strong, powerful market along with deepening degradation of the environment and increasing social discontent – neoliberalism is the reigning ideology; absence of environmental and social regulation and the development of a city-state; growing social disparities adversely affecting young people and the middle-class; privatization of state land.
- ♦ **Regulated market scenario** – A strong, powerful market; growing attention to the environment but with a splintered and polarized society; promoting growth; creation of a bureaucratic-institutional mechanism; integration between economy and environment; absence of social inclusion; restraint on the concentration of wealth.

### **Additional scenarios based on major change in economic and social structures**

#### *Grassroots initiative scenario, social mechanism dominant*

- ♦ **Community mosaic** – Strengthening of social resilience and reduction of environmental degradation but a significant drop in economic growth—emphasis placed on inclusion (integration of all elements of society); promotion of grassroots processes; promotion of social businesses, new entrepreneurship networks and organizational and community structures; emphasis on local economy.

#### *State as developer scenario, state mechanism dominant*

- ♦ **Intervening/developing state** – Adoption of a post-neoliberal approach with social and environmental emphases, government intervention in market processes – as a result of social unrest and outburst of waves of protest throughout the country which led to the rehabilitation and intervention of the bureaucratic-institutional system; drop in economic growth.

#### *Two scenarios were developed in which the geopolitical mechanism is dominant*

- ♦ **Unregulated fortress state** – Environmental, economic and social deterioration caused by political seclusion – worsening of geopolitical status along with boycott and sanctions; cessation of foreign investments; ongoing environmental neglect; increase of environmental risks; growing reliance on local natural resources.
- ♦ **Regulated fortress state** – Strong regulation following political seclusion, drop in economic growth while protecting the environment and building social resilience – worsening of geopolitical status along with boycott and sanctions; cessation of foreign investments; government intervention; development of innovation in defense industries; establishment of inclusion and regulation mechanisms in the social and environmental areas; protection of reserves and effective use of resources; protection of open landscape areas for security reasons.

The different scenarios have different levels of sustainability (environment, wellbeing and resilience). A scenario from the “market superiority” group can reach a relatively high level of sustainability only in a “regulated market.” The social scenarios would reinforce wellbeing and the environment but their economic price would be high. In the geopolitical situation of a fortress state, sustainability would be compromised from all aspects but regulation could mitigate the severity of the damage. An analysis indicates that the level of sustainability in each scenario is far from the desirable situation and that we should be able to reach a higher level of sustainability – whatever the scenario.

### **A vision of sustainability for Israel 2030**

Although we cannot anticipate whether and which of the scenarios is likely to unfold, we must define a

vision of where we want to go. The vision needs to be viable and realistic, not utopian.

The vision for sustainability in Israel as formulated by the 2030 project team included:

“Israel in 2030 will be a country whose citizens live in an environment that provides economic wellbeing, social resilience and personal security while enabling a diverse range of community lifestyles. It will be a country that promotes innovation and enterprise, thriving urban life, inclusion and access for all of the population to employment opportunities and services. It will be a country where there is absolute decoupling of economic growth from deterioration of the environment and the continual rise in material consumption. In 2030 the quality of life in Israel of the current generation will be high but will include responsibility for protecting natural resources for the present and future generations.”

The detailed vision addresses diverse aspects including: population, economy, society, urbanism, infrastructure, water, energy, ecology, governance and international relations.

The understanding that the “business as usual” scenario will not lead to the vision for 2030 and that incremental improvements of existing systems, beneficial as they may be, will only perpetuate the existing situation without leading to the desired long-term outcome, leads to the conclusion that deep strategic intervention is needed to bridge the gaps that exist between each of the scenarios and the vision.

### **Recommendations for long-term strategic directions of thinking:**

We identified nine robust strategies that are relevant to a large number of the scenarios and that will enable the realization of the vision by bridging the gaps between the scenarios and the vision. Outlook

2030 recommends implementing all of the strategies simultaneously.

- a) **Promoting innovation and enterprise:** Stimulating innovation leading to more efficient resource use, product development, the development of a circular economy, and a transition from the consumption of products to the consumption of services.
- b) **Integrated risk management and resilience:** Risks must first be identified, defined and evaluated. Risk management requires not only measures to reduce risks as far as possible but also measures to increase the resilience of society and the environment, so as to be able to cope with the residual risks that cannot be mitigated.
- c) **Developing a long-term integrated vision:** Creating long-term systemic thinking, periodically updated, by reinforcing the connection and coordination between proactive planning and regulation. According to this strategy a joint lexicon of terminology and language should be created for the public administration to delineate a long-term development policy incorporating the economy, environment and society.
- d) **Cultivating values beyond material consumption:** Generating a deep psychological transformation in consumer behavior in order to reduce the consumption of material resources and replace it with other, less material, patterns of consumption, such as sharing and collaborative consumption.
- e) **Cultivating community life:** Cultivating a new value system based on solidarity, mutual support, community activity, intercultural encounters and the creation of new economic opportunities.
- f) **Urbanity and the revival of city centers:** Concentrating development in existing urban centers while increasing their density and social diversity to create an urban renaissance.

Developing urbanism and creating thriving public spaces allowing random, spontaneous encounters that lead to interdisciplinary, cross-cultural connections and networks that create synergy between diverse ideas and outlooks and provide fertile ground for innovation.

- g) Expanding the concept of security to include the environment, society and economy:** Preparation for civilian crises that could harm national security and harm the society and economy may be just as significant as preparation for terrorist attacks or conflicts with hostile countries.
- h) Development of leadership with a sense of responsibility for future generations:** Development and training of a leadership that will lead society to the vision of sustainability.
- i) Adoption of evaluation methods and systems:** Establishing evaluation systems to measure sustainability, to facilitate the identification of critical points and benchmarks that can help policymakers plan courses of action and evaluate their results.

Based on the above, and with an understanding of the current and future trends and processes in Israel and around the world, five focused strategies were proposed:

- 1. Sustainable consumption.** Consumption patterns drive economic growth and are currently taxing environmental resources beyond reasonable ecological boundaries. In order to change the lifestyle of the public as a whole and adopt less material consumption patterns that would still provide a high level of wellbeing, this strategy recommends promoting consumption models that provide the consumer with access to desirable benefits or values without requiring individual purchase of material products (service provision). Instead, they would facilitate effective use of

assets, products, services and skills that are in a state of “underutilization” during most hours of the day or year (sharing consumption). To promote models of “sustainable consumption” it is necessary to remove barriers on the one hand, and develop missing tools on the other, while maximizing the use of social networking platforms to make information accessible and create interpersonal connectivity. Models of sustainable consumption already exist in the areas of travel, clothing, household equipment, children’s equipment and entertainment. This strategy recommends expanding them to the areas of time, space and skills in the public and private spheres. The development of “sustainable consumption” largely depends on business sector initiatives and civil society’s awareness level. But the government can support the transition to “sustainable consumption” by educating for social values, providing access to information and underutilized public spaces, and building trust between suppliers and users.

- 2. Thriving urbanism.** Urban living generates opportunities to reduce pressures on environmental resources, supports a less material lifestyle, creates platforms for promoting innovation and creates diverse and resilient communities. Urbanism as a lifestyle in public spaces and especially along city streets can be achieved by mixed land use, reducing distances for pedestrians and reducing dependence on and use of private vehicles. This strategy recommends making urbanism a budgetary priority, developing evaluation tools to assess projects by their contribution to urbanism and integrating functions which gather people together, such as higher education campuses and open air markets. It recommends that the business sector choose urban locations (rather than out-of-town locations), promote alternative means of worker access other than by private vehicles and develop attractive urban real estate models, especially for the young and elderly populations.

### 3. **Strengthening social-community resilience.**

In a world of uncertainty it is important to strengthen the ability to adjust and contend with changes and risks, turning them into new opportunities rather than seeing them only as disturbances. The purpose of this strategy is to promote the creation of communities that enjoy a high quality of life and wellness while realizing the individual and the community's potential. It recommends strengthening resilience at the local level, transferring powers to local authorities and to the community, identifying vulnerable populations and finding ways to reduce their vulnerability, promoting active community initiatives and developing tools to evaluate community resilience.

### 4. **Integrated management of marketable natural resources (natural capital).**

Without a policy for the management of imported natural resources as well as integrated management of its local natural capital, Israel might find itself unprepared for the competition over export and import of raw materials and manufactured goods in global markets. This strategy recommends taking measures to manage marketable natural capital for the economy, similar to the management of financial capital and human capital (labor). They include an integrated management policy for all marketable natural resources and the development of a national plan to combine physical, economic and environmental aspects of their development. It also recommends a review the criteria for setting royalties to reflect public values and externalities generated by resource extraction.

### 5. **Innovation for sustainability.**

Economic trends indicate that Israel has to find ways that enable it to stand at the forefront of environmental, technological and business-organizational innovation in order to compete in global markets. This strategy recommends recognizing the fact that innovation carries risks and that opportunities

for innovation should not be blocked due to claims that their effectiveness has not yet been proven. We recommend that the business sector in Israel take an active role in international forums that discuss innovation for sustainability, create research and development partnerships between companies from different countries and be willing to try to implement innovative ideas in Israel. We also propose that the government initiate an evaluation of the drivers of innovation – science, skilled human resources, financial drivers and regulation – and recruit civil society as a partner to support and review the testing of innovation.

A wide variety of policy tools will be needed for the implementation of the nine robust strategies and the five focused strategies. Outlook 2030 proposes that the tools and means for implementation are bundled into “packages,” in order to create synergy between them, identify the preconditions necessary to enable their implementation and add complementary tools which could overcome reservations about them, and make the policy tools effective and efficient, socially and politically acceptable and give them a high likelihood of realization. The following three policy tool packages are proposed:

1. **The “whole of government” package.** The purpose of this package is primarily to ensure coordination between all the bodies responsible for a comprehensive long-term overview of the economy and society. The package proposes the establishment of a government integration body that would include representatives of the following bodies: the Finance Ministry's budget department, the economic council in the Prime Minister's office, the planning administrations in the Interior Ministry and the Ministry of Environmental Protection. The purpose of establishing the integrating body is to initiate and promote coordinated plans for action at the national level.

2. **The “risk management” package.** The purpose of this package is to expand activities relating to identifying and evaluating risks and building resilience to them. The activity will take place on three levels: 1. Establishing a unit for the coordination and management of environmental risks which will focus on risks that result from incremental processes as well as risks that result from sudden environmental events; 2. Encouraging the financial sector to include environmental considerations when making decisions on financial investments; 3. Expanding the focus on risks and resilience-building within local government. Additional measures here include leadership development and strengthening local government with a particular emphasis on the needs of weak local authorities in the periphery.
3. **The “community-business” package.** The common denominator between the measures that constitute the third package is that they are meant to advance non-governmental activities: local-community social-environmental activity and business activity. In the community component the critical measures are providing access to credit and a budget for community activity and lowering barriers to enable the use of public assets. Complementary measures to encourage community activity would be decentralizing powers to the community level, developing strong local leadership and stimulating local-regional democracy. The second component consists of encouraging business models that emphasize the transition from the consumption of products to the provision of services and the transition from material consumption to sustainable consumption.

Stakeholders were identified who would benefit from and be interested in promoting each policy package and would be capable of adapting the required measures during the process of their implementation.

Adjustments are usually needed as unanticipated difficulties may arise, the parties involved may act differently than had been expected or new parties not identified in advance may express interest.

Outlook 2030 is a pioneering attempt to delineate a framework for long-term thinking.

The study, based on the forefront of global and Israeli research and discourse and on current and emerging trends, portrays the challenges that face Israel and outlines courses of action whose implementation would lead it to a more sustainable future.

The study provided an initial basis for ongoing and dynamic thinking, which should be periodically updated, in accordance with science-based information, updating of trends, assessing risks and adjusting strategies. We hope that Outlook will provide a sound basis for well-informed dialogue on long-term thinking about sustainability in Israel. The Outlook 2030 team believes that implementation of all of the recommendations of the strategies and policy packages would make a significant contribution to Israel’s environmental, social and economic resilience.

Continuation of the process requires a long-term partnership between government, local authorities, the business sector and civil society.

Adoption of the document’s conclusions by the Israeli government would be a first and promising step towards achieving a sustainable future for Israel.