

Sustainable Industrial Zones in Israel

In Israel, the industrial areas, which include industrial plants, commercial centers and offices, by nature have many environmental impacts, such as air pollution, harm to open spaces, generation of waste and wastewater, energy consumption and emissions of greenhouse gas. Monitoring and minimizing the environmental damage of these activities is currently achieved through regulatory tools, licenses and permits. These environmental damages can be further reduced, and efficiency and profitability can be increased by applying sustainable development and environmental management features across the entire industrial zone.



A Sustainable consumption and Production National Action Plan (SDG12.1) was developed in Israel through nationally owned multi-stakeholder processes, focusing on social environmental businesses, cleantech, green public procurement, environmental standards and labeling and resource efficiency. The implementation of the plan is ongoing through selected projects and initiatives.

The Ministry of Environmental Protection and the Ministry of Economy, with United Nations Environment Programme (UNEP)'s support under the SwitchMed project, have developed guidelines for Sustainable Industrial Zones in Israel.

The Sustainable Industrial Zones will attract companies and industries seeking to position themselves as having improved environmental performance and companies that have trade or business relationships with international corporations that are required to meet stringent environmental standards. The guiding document provided the principles and measures that will enable the development of sustainable industrial zones in the following areas: energy, water, wastewater, industrial waste, transportation, sustainable management of the industrial zone and conservation of biological diversity.

<p>Energy</p> <ul style="list-style-type: none"> • Energy efficient lighting in public areas • Solar lighting in public areas • Production of photovoltaic electricity • Cogeneration energy production center 	<p>Water</p> <ul style="list-style-type: none"> • Water efficient irrigation & gardening • Irrigation with runoff water • Application of the waterfall principle in industry • Conservation of surface runoff 	<p>Transportation</p> <ul style="list-style-type: none"> • Transportation system and funding public transportation • Improving public transport accessibility • Infrastructure for joint travel • Sustainable transportation-bicycle and pedestrian lanes 	<p>Waste</p> <ul style="list-style-type: none"> • Reducing construction waste & use of recycled materials • Separation and reuse of non-hazardous waste 	<p>Wastewater</p> <ul style="list-style-type: none"> • Joint wastewater treatment facilities • Treatment using constructed wetlands
<p>Conservation of biological diversity</p> <ul style="list-style-type: none"> • Measures for improving environmental performance in the field of biodiversity 				
<p>Sustainable management of the industrial area</p> <ul style="list-style-type: none"> • Setting & meeting environmental standards • Publication of environmental reports • Public participation in the planning and operation of the industrial zone • Industrial symbiosis 				



SwitchMed Programme is funded by the European Union

7 Areas

20% green house gas reduction

3.2 Million tons COs emission reduction

0.66 Million tons COs emission reduction

For each area, it includes brief explanations, a tabular summary of the stages required to implement the proposed tools according to a timeline that represents the stages of development for the industrial zone, and a detailed explanation of each tool offered according to uniform and permanent structure:

- General background, purpose, method of implementation;
- Environmental benefits, obstacles, financial/operational benefits;
- Whether it is a binding means or one dependent on feasibility inspections;
- Feasibility inspection: feasibility in accordance with the stage of the project, regulation and standardization (meeting relevant regulation and required standards), techno-economic feasibility (cost-benefit versus conventional alternative and operational feasibility for implementation), economic criteria and subsidy options.

The measures presented refer to all stages, from establishment of the industrial zone to the ongoing operational stage. Therefore, the Industrial Zones Administration can examine and implement the tools and measures in accordance with the stage the industrial zone is in, from conception to the operational stage. The existing industrial zones can also refer to the measures presented in their category, depending on the stage in which they are in the work plan

A national plan for the reduction of greenhouse gas emissions approved in 2010 stated that by 2020 the State of Israel is obligated to reduce its greenhouse gas emissions by 20%, compared with the “business as usual” scenario. The potential for reducing emissions through energy efficiency was mapped up to 2020. In the industrial sector, the emission reduction potential is 3.2 million tons, equivalent to carbon dioxide, in which street lighting among others have a reduction potential of 0.66 million tons, equivalent to carbon dioxide. Energy efficiency not only reduces greenhouse gas emissions and directly reduces domestic air pollution, but also creates significant financial savings. The industrial zone administration can reduce electricity and energy consumption by implementing cost-effective lighting in public areas of the industrial zone and assist enterprises in domestic energy consumption.

UN Environment Programme

UNEP is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.



The EU-funded SwitchMed programme assists eight countries in the southern Mediterranean to switch to sustainable patterns of consumption and production and supports national and regional stakeholders in achieving productive, circular, and sharing economies in the Mediterranean. www.switchmed.eu