

Toolkit - Resources for trainers

Good Practice - SDG Nr. 15

Hydropolis

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

Goal number 15 – Life on Land.

Social Goals

The mission of Hydropolis is to provide the most effective technology, which is an ecological alternative to conventional agriculture. Modern systems of vertical crops are designed and built at Hydropolis. The authors of the technology want to build a world where everyone has access to fresh water and healthy food. They offer customers efficient and sustainable agriculture for the 21st century. They want to inspire farmers and entrepreneurs around the world to build a more sustainable food chain together. Together - for generations to come.

The aims are:

- Reduction of water consumption and dust emission to the atmosphere through hydroponic plant cultivation.
- Using urbanized areas to create local and widely accessible vertical crops.
- Research and development to expand cultivation opportunities and reduce labor costs.
- Creation of independent, self-sufficient centers (cities, campuses).
- Increasing the comfort and safety of work when growing plants.



What need does it cover?

Conventional agriculture is not enough to meet the needs of the 21st century. In the future, vertical farming will not only be the most profitable form of cultivation, but also necessary for climatic reasons.

<p>How was it founded?</p>	<p>The Hydropolis team consists of a group of specialists from various fields. Among us there are engineers, developers, automation specialists, cultivation technologists, biologists and people responsible for sales, marketing and production. Hydropolis provides technology that has a real impact on the future of agriculture.</p>
<p>How does it relate to SDGs</p>	<p>The practice accomplishes the SDGs goal Nr 15 – Life on land but its also refer to the another SDGs goals: 2,3,11,12,13</p>
<p>Good practices</p>	<p>Hydropolis is engaged in vertical agriculture. Cultivation systems have been developed that allow low-growth deciduous plants (such as lettuce, herbs, flowers) to grow all year round, regardless of the climate. Two solutions have been designed to meet the needs of future customers:</p> <ul style="list-style-type: none"> • Plantainer, a hydroponic growing container with a controlled atmosphere system that allows you to grow 4.9 tons of food per year. • Smart Crop system, with which you can fill any space (hall, warehouse, basement). Smart Crop delivers over 100 pieces of lettuce per 1 m², and the ergonomic design allows for quick and easy cultivation. <p>When working on technology, the authors were guided by the idea of wise management of resources, such as: water, energy, work, space. As a result, both Plantainer and Smart Crop save 95% of water compared to traditional agriculture. Specially designed LED lamps that illuminate plants and the automatic atmosphere maintenance system not only accelerate the growth of the plant, but also ensure its high quality.</p> <p>Due to the cultivation system, there is no need to use herbicides, fungicides or other unnecessary cultivation chemicals. As a result, the product grown in the Hydropolis technology is healthy and safe for humans, and the cultivation does not pollute the air, soil and groundwater.</p> <p>Hydropolis products are designed together with renewable energy sources: photovoltaics and heat pumps.</p>



How to work on it

The Inclusion teachers can use examples of good practice from the project

“Hydropolis” to show the Inclusion students practical examples of reduction of water consumption and dust emission to the atmosphere through hydroponic plant cultivation.

