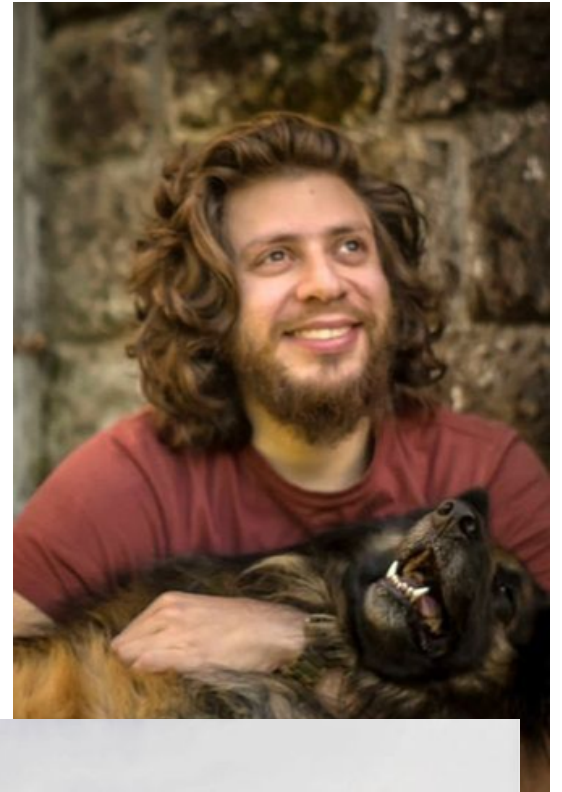




LIFEHAUS

Fossil Free House



Lifehaus is the answer to the water and energy crisis by the innovative young architect Nizar Haddad. It is located in Baskinta village in Lebanon.

Lifehaus is a self-sufficient house in terms of energy, water, heating and cooling, in addition to sustainable agriculture that provides a source of food.

Lifehaus has an area of 160 square meters, including an indoor agricultural area. Construction was carried out by a group of local community residents that have different scientific and technical backgrounds. The house combines scientific knowledge and ancestral techniques.



The building materials used are local, such as clay and stones, in addition to rubber tires and glass containers, as a method of reusing solid waste. Wood and iron sheets are also used.



LIFEHAUS



Lifehaus' energy needs are met through:

- Solar energy using solar panels
- A vertical windmill
- Water movement inside the house
- Human effort via an electric bike
- Biogas from black water for cooking

The house is equipped with efficient equipment such as LED lighting, a solar electric cooker, and insulation that helps heat hot water and cool the refrigerator by keeping temperatures stable.



The walls of the house store heat during summer, and this thermal mass returns to adjust the temperature in the winter, which guarantees stable temperatures throughout the year.

The glass room, which contains various plants, also contributes to heating the house in winter.

A natural ventilation system and insulated earth walls eliminate the need for cooling or heating with external resources.

Lifehaus collects rain water. The gray water is used to irrigate the crops, and the black water is poured into a septic tank to produce biogas, then the treated water is used for irrigation.





All of these environmental engineering techniques have made Lifehaus a sustainable, Fossil Free house and a lifestyle model with zero bills for water, electricity, heating and cooling, in addition to the food source provided by the indoor garden.



LIFEHAUS



The community center in Kharayeb, Lebanon, funded by the United Nations Development Programme (UNDP), is inspired by Lifehaus.



LIFEHAUS

Media Links

[The Lifehaus project website](#)

dwnews: Lebanese architect Nizar Haddad hopes his model for a "self-sufficient" house becomes the new standard of construction that helps save the planet, August 2022.

The Daily Star: Sustainable House Finds Alternate Purpose for Tires, February 2018

Apave: Building a Sustainable World - The Lifehaus Project, October 2017



LIFEHAUS



LIFEHAUS

**"Our solution is to go back
to the roots"**

Nizar Haddad, Architect and LIFEHAUS founder.