

# Case Studies

## Tourism & Hospitality



## Gozo Leads as a Sustainable, Eco-Tourism Destination with SmartFlowers



*Gozo Multi Modal Hub, Ta' Xhajma, Malta*

With its terraced landscapes, heritage villages, and dramatic coastlines, the Island of Gozo attracts travelers seeking nature, wellness, authenticity, and local craft. To reinforce its identity as a forward-thinking eco-tourism destination, the Gozo Multi Modal Hub in Ta' Xhajma, Malta launched a grand initiative: the installation of fifteen SmartFlowers.

This represents one of the largest installations in Europe. The clean energy will support lighting and charging needs of the electric bus fleet servicing the hub as well as the Park & Ride facility between Mġarr Harbour and the hub.

Placed strategically at the hub, the SmartFlowers created a unified sustainability narrative across Gozo; visitors see sustainability in action the moment they arrive.

Each SmartFlower serves as:

- A public sustainability beacon
- A photogenic, shareable visual icon for social media and tourism promotion
- A conversation piece that links innovation with Gozo's natural beauty

This installation "demonstrates how modern technology can be applied in a practical way to improve the quality of life and build a greener more resilient economy," stated Minister for Gozo and Planning of Malta Clint Camilleri.

The SmartFlower initiative aligns with Gozo's strategic goals to:

- Attract environmentally conscious travelers
- Reduce the island's carbon footprint
- Promote Gozo as a destination where nature and innovation coexist
- Showcase commitment to Malta's Vision 2050 climate targets
- Differentiate Gozo from mass-market tourist islands competing on price, not values



The SmartFlowers positions Gozo and Malta on the global map as pioneers in renewable energy practices and as models for other countries building a more sustainable future with renewable energy. Camilleri explained, "By installing these [SmartFlowers] in Europe, we show how Gozo can be a model for sustainable innovation." The project has generated significant public attention, demonstrating how symbolic sustainability projects like this can attract positive attention, reinforce one's reputation as a leader in sustainability practices, and inspire others to follow suit.

By visibly integrating the units within public infrastructure, Gozo reinforces its image as a sustainable and innovative destination, as well as enhances its international visibility and appeal to environmentally conscious visitors. For the island of Gozo and for Malta, this project is not just an energy-infrastructure upgrade, but also a bold statement on the future of clean energy, mobility and sustainable development.

## Texas Business Park Recruits Innovative Companies Using SmartFlowers



*Henderson Innovation Park, Henderson, Texas*

From its inception, Henderson Texas Economic Development (EDC) envisioned Henderson Innovation Park as a visible, working symbol of innovation. It chose SmartFlower to strengthen its reputation as a sustainable brand in the community and attract businesses that embrace sustainability.

With five SmartFlowers, the park is an iconic landmark and supportive ecosystem for new businesses to innovate and expand. The SmartFlowers “anchor the park’s identity as a clean-tech, future ready space and help us recruit tenants who value sustainability,” stated Henderson Texas EDC’s Executive Director Bret Gardella. He continued saying, “The SmartFlowers immediately signal that Henderson is serious about next generation infrastructure and is a partner for companies building sustainable operations.”



The SmartFlowers embody its commitment to clean energy, innovation and economic development to potential businesses:

- Sustainability in Action: The SmartFlowers generate clean energy onsite, supporting Henderson's broader effort to reduce emissions and operating costs.
- Community Engagement: SmartFlower is a living demonstration of advanced solar technology with features which the park can leverage for tours, STEM partnerships, and new projects.
- Economic Development: The SmartFlowers helps recruit innovative companies that share the park's sustainability vision.



For Henderson Innovation Park, SmartFlower represents more than solar power. It's a bold expression of innovation, education, and environmental leadership for attracting partners and businesses to the park. By integrating SmartFlower into its park, Henderson has created an iconic gateway to a more sustainable and innovative future.

## Valverbe Shines Bright in Varaita Valley with Smartflower

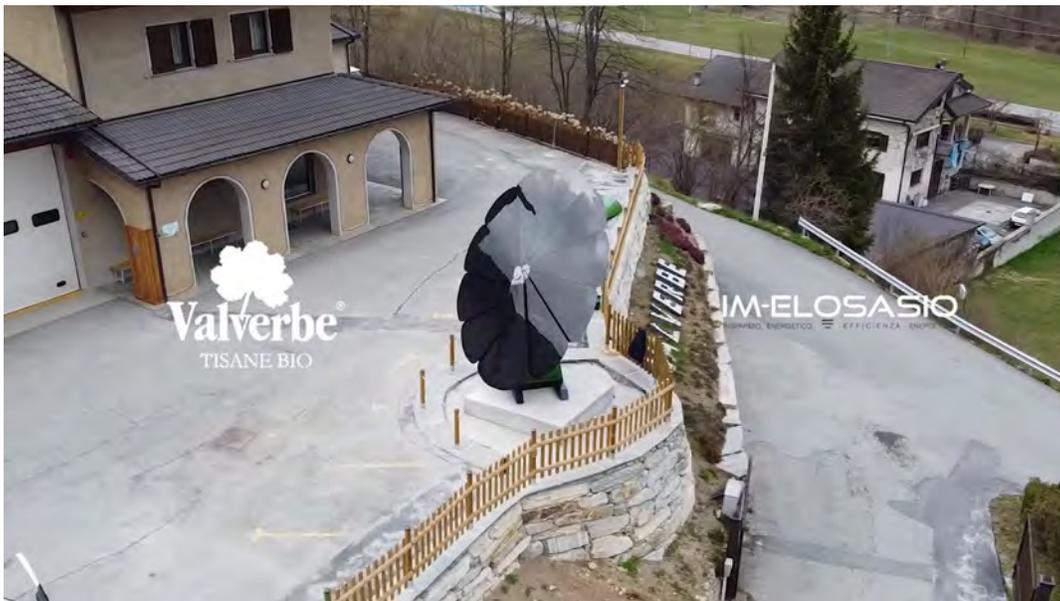
Located in the alpine Varaita Valley in Italy, the herbal tea company Valverbe prides itself on balancing ancient herbal traditions with advanced research into new production technologies. Earlier in the spring of 2022, Valverbe welcomed its first Smartflower at its headquarters, installed by Italian dealer Im-El Osasio. The Smartflower provides power to Valverbe's electric vehicles and the industrial processes that are part of their manufacturing process, and has also become a new landmark for both the company and the nearby town of Melle.



Valverbe first learned about the Smartflower through another iconic Smartflower installation in Italy—the [GreenPea Retail Park](#) in Turin. Two Smartflowers, provided by energy industry leader Enel X, welcome customers to the green shopping center and are one of the many ways GreenPea showcases its sustainable efforts. Being a company that produces medicinal herbs and herbal tea products, the staff at Valverbe immediately fell in love with the idea of being able to produce clean energy through their very own giant solar flower.

“The Smartflower serves Valverbe’s eco-friendly philosophy and purpose. We have always cared strongly about the energy sources we use, and we make sure to only use renewable energy to produce our products,” said Luca Fasano, the CEO of Valverbe. Aside from the Smartflower, Valverbe has solar panels installed on the roof, and any energy they buy comes from certified renewable sources. Their packaging is sustainable as well: Valverbe’s herbal teas are packed in boxes made of cardboard manufactured using renewable energy, their filter bags are compostable, they make sure not to use any plastic in their packaging, and even the sealing thread is made from 100% cotton!

However, it's hard to ensure that customers and visitors at Valverbe understand the full extent of their commitment to sustainability at first glance, especially when these impressive eco-friendly efforts are rarely visible to the public eye. Their new Smartflower was the perfect solution. It would serve as Valverbe's solar centerpiece, and start conversations about clean energy. "At Valverbe, we pride ourselves on our attention to detail. We installed the Smartflower at the center of our facilities to show that when it comes to agricultural production and herb processing, our main aim is to preserve the environment," said Fasano.



[\[Valverbe's New Smartflower Shines on Varaita Valley on YouTube\]](#)

So far, visitors have approached the new Smartflower with curiosity and enthusiasm. Many photos of the solar flower have been taken, and staff members have observed that the large solar 'petals' of the system have had a major impact on visitors. Valverbe is currently working on developing new tourism activities at its headquarters to deliver a truly unforgettable experience for its visitors, and the Smartflower is poised to star as one of its new attractions.

"Sun, soil, water, and passion are the ingredients that make up the Valverbe brand. The Smartflower is our little sun that provides us with energy during any time of the day. We believe that respecting the environment must involve all stages of our processes, which is why we are investing in technology that maximizes our energy savings and ensures carbon neutrality," said Fasano.

## **Maglebo Vineyard Embraces Both Nature and Technology with Two New Smartflowers**

Two Smartflowers were recently installed at the Maglebo Vineyard & Country House in Helsingør, Denmark. The vineyard is both eco-friendly and self-sustainable and contains not just a Bed and Breakfast, but also a fruit and vegetable garden that grows produce like potatoes, oats, and other vegetables, as well as a 4-hectare forest. The two new solar flower additions will help power the geothermal heating system that keeps the buildings in the vineyard warm despite the cold climate.



The owner of the Maglebo vineyard, Gert Lassen, discovered the Smartflower back in 2016 when he was looking for a sustainable way to power his geothermal heating system. Now, the two Smartflowers are what provides electricity for the vineyard's geothermal system. Any leftover power is stored in the vineyard's Powerbank and can be used to power the lights and appliances in the vineyard.

However, it is not just power production that the Smartflowers bring to the Maglebo Vineyard. One Smartflower is installed right in front of the B&B terrace and works as a 'sunbrella' that provides guests with shade and shelter from the rain. Furthermore, the Smartflower acts as a piece of modern art for the guests to view while enjoying their stay at the country house and showcases the vineyard's commitment to living sustainably. "Everybody who sees the Smartflower falls in love with it," said Gert, "It's a powerful and good-looking piece of solar art."



While the two Smartflowers are the vineyard's main solar showpieces, Gert and his team are hard at work to make sure that they practice what they preach. Guests are served 'farm-to-table' meals that are made with a combination of the vineyard's homegrown vegetables and produce purchased directly from local farms and butchers. A 'living roof' comprised of various species of grass and flowers exists on the roof of the main building to promote biodiversity while also absorbing rainwater during subtropical rainstorms to prevent flooding. 500 pinewood trees and 50 fruit trees were also planted in the 4-hectare forest to offset carbon emissions while providing homes for the native birds, bees and butterflies that reside in Helsingø. The vineyard is even part of the 'Andelsgaard' movement in Denmark, in which old farms are converted into sustainable green farms and become part of a cooperative!

"We focus on being sustainable and living cleanly in all aspects of life—our potatoes come from the ground, our wine from our grapevines, and our power from the sun," said Gert. Indeed, Maglebo Vineyard & Country House has not only chosen to embrace nature traditionally but to also incorporate modern, innovative technology into their business. While many might see the combination of traditional living and modernity as conflicting, the two go hand-in-hand when it comes to fulfilling the vineyard's goal of promoting an authentic green lifestyle. "The Smartflowers have become part of Maglebo Vineyard's identity," said Gert, "People in the community tip their hats in respect when they see us taking responsibility and showing future generations how to live sustainably."



## Denmark's First Publicly Owned Smartflower Blooms on 100% Renewable Samsø Island



*Samsø Island, Denmark*

Denmark's first publicly owned Smartflower was installed on Samsø Island earlier this year in May and has been blooming ever since. The Smartflower was installed right in front of the office of the Mayor of Samsø Island, Marcel Meijer, and provides power to the island. Given Samsø Island's reputation as a model renewable energy island, Smartflower is proud to help the island in achieving its goal of creating a greater sustainable future for its inhabitants.

A local innovative electrician was the one who introduced the Smartflower to Samsø Island. It was a great hit with the Samsø Municipality, who wanted to experiment with implementing tracking solar panels in an area with plenty of space on their island. Given the Smartflower's dual-axis tracking capabilities, as well as its aesthetic appeal as a work of solar art, it is no wonder that the project was a success!

While Samsø Island used to be entirely dependent on oil, everything changed when it won a government competition in 1997 to become a model renewable energy community. The island became 100% powered by renewable energy ten years later in 2007 and has now set its sights on becoming 100% fossil fuel-free by 2030. The Smartflower is but one piece of a bigger puzzle to make sure that the island achieves its goal. "The municipality has an obligation to 'walk the talk' and demonstrate sustainable transition in action," said Mayor Marcel Meijer when asked why they chose



Smartflower. Wind turbines and solar panels aside, the island has also implemented other initiatives such as energy-optimized lighting, electric vehicle charging stations, sustainable golf courses, and even hosts an annual sustainability festival (which has unfortunately been canceled this year).

While not many have had a chance to spot the Smartflower at Samsø Island due to the current pandemic, we expect that the solar flower will be received positively by the Samsø community as they have been at other Smartflower installations. We look forward to watching the island expand its sustainable initiatives and wish them the best of luck with becoming completely fossil-fuel free by 2030.

## Smartflower Brings Power to Tivoli Friheden in Denmark



*Tivoli Friheden, Denmark*

Tivoli Friheden is a well-known amusement park located right in the heart of Aarhus, Denmark, which not only added a new amusement called the ‘Hjertekig’, a 65-meter free-fall tower, but also installed the world’s first all-in-one solar flower as part of their sustainability initiatives. The Smartflower powers the fountain in ‘The Green Square’, a newly built area in the park focused on combining sustainable solutions with the classic family-friendly amusement park experience.

Henrik Ragborg Olesen, the CEO of Tivoli Friheden said, “Our vision was to showcase the use of sustainable solar energy, and the Smartflower fit perfectly into our park design and layout... [it is] a fun and attractive way to present the park as a place that focuses on renewable energy and sustainability.”

The Smartflower is not just a sustainable energy resource at Tivoli Friheden—it is an interactive and educational resource as well. The power produced by the Smartflower



is displayed on a screen to those in the park, and families and park-goers can compare that power with “the amount of power that a family (joint forces for up to 4 people) can create by turning a wheel”, said Olesen. This allows for them to understand in a physical way how much energy the Smartflower can create. “Our guests love when we do more than just entertainment,” said Olesen, “we work on creating ‘edutainment!’.”

With Denmark’s and Aarhus’ admirable sustainable goals and achievements acting as a backdrop to Tivoli Friheden, it’s no wonder that the park has put in so much thought and effort into incorporating sustainability into their operations and attractions. Denmark aims to reach net-zero emissions by 2050, while Aarhus aims to be carbon-neutral by 2030. Aarhus was even the first large city in Denmark to supply its citizens and local companies with green biomass heating and electricity! Of course, this effort for net-zero emissions in Denmark isn’t just a priority for the public sector, private companies are also seeking fresh ways to help reach the goal. “We -as a country- need to work on different sources to meet [Denmark’s] ambitious goal for 2050,” said Olesen. Smartflower is pleased to be the solar innovation that Tivoli Friheden and Henrik Ragborg Olesen chose to help pave the way of creating a greener future.