SPROUTING A COMMUNITY SPIRIT

Sprout Hub is fast becoming a focal point for community sustainability

Insulation is one of the most important building features for comfort and energy efficiency. Proper insulation helps the building to remain comfortable and energy efficient without the need for extremely costly heating and/or cooling machinery that excessively consume energy. In the modern built environment where aluminium windows, doors and facades are commonplace, ensuring adequate and appropriate insulation can lead to tremendous energy – and cost – savings.

A market leader in multiple industries with a suite of innovative and market-oriented solutions, Technoform specialises in the optimisation of the thermal zone in windows/doors/facades, creating a comfortable indoor environment and keeping energy costs low. This results in improved thermal performance of the building envelope, a better energy footprint and a considerable reduction in carbon emissions.

One of its core solutions, the Thermal Break (SGBP✓✓✓), improves the thermal performance of windows, doors and facades. Connecting the exterior and interior aluminium profiles, while keeping mechanical performance at the highest level, the solution prevents direct exchange of heat and cold – and create what is known as the "thermal break". The result: minimised thermal conductivity, optimised building efficiency, and a better energy footprint.

Technoform's solutions have shown to be able to reduce energy consumption due to façade heat gain by more than 25 percent, considerably reducing carbon emissions. All these translate to energy and cost savings which can then be spent on other areas of the building, knowing that the building's insulation is well taken care of.

With more than 50 years in the industry, Technoform works closely with its partners to develop thermal insulation solutions for the building façade. From consultation on design and optimisation of the thermal zone in facade systems to the support and documentation for the specification of Thermal break and Warm Edge Spacer solutions, Technoform stands ready to optimise your thermal zone.
According to a Channel News Asia report in 2018, only 1 percent (compared to 20 percent in 1961) of Singapore’s total land space is occupied by farmland and the nation imports 90 percent of its food. These staggering numbers reflect the profundity of Singapore’s transformation since its independence; migrating from an agrarian society in the 1960s to a knowledge-based, information technology-driven economy, outsourcing most of its food production in the process.

While this shift has already significantly remodeled the country’s food landscape, we can only expect the stability of our food supply, both current and in future, to be further threatened by climate change, cross border supply shocks and increases in food prices due to global food crises. Unfortunately, the general masses have been mostly shielded from these issues – primarily due to the lack of exposure to food shortages, easy access to food and advanced logistics in Singapore. The issue of food self-sufficiency was only highlighted when the government called for more initiatives and campaigns to bolster the nation’s food security. The approach is to develop local production capabilities - through increases in Agrotechnology Parks and supporting technologically-advanced indoor vertical farms - to achieve greater self-sufficiency. This is apparent through the 30by30 goal – to produce 30 percent of Singapore’s nutritional needs locally by 2030.

City Sprouts is a social enterprise founded in 2018, whose core mission is to rejuvenate urban spaces and communities through the development of robust solutions for modern agriculture. One of the key problem statements that they set out to resolve is the divide between people and food production. Although there was a great nationwide push towards being food independent, the founders believed that more effort is needed from the ground up to complement this movement; through raising awareness about the current food system and empowering people to take ownership over growing their own food. In May 2019, City Sprouts was awarded a tender to redevelop a part of the former Henderson Secondary School into a food and social hub concept – now called Sprout Hub. Co-located with a nursing home and childcare center, Sprout Hub is an ecosystem that revolves around the concept of subsistent farming in the city, food, education and community.
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Using the old school field, City Sprouts created a community farm in Sprout Hub that runs on an allotment model, where hobbyist and entrepreneurs alike can rent a greenhouse to grow their own food or pilot their innovations. By detaching the masses from production-based agriculture, this model inspires users to take on an active ground-up role in tackling food security. Inasmuch as Singapore lacks space for experimental farms, this model also welcomes aspiring pre-commercialised farmers to pilot or testbed their cultivation systems and methods. Ultimately, by incorporating inclusivity and community-centeredness into this model, City Sprouts hopes to bring the experience of urban farming to the people, giving them a glimpse into how food was and should be grown: with the community and for the community. To reinforce the sense of community and preserve the history of the space, City Sprouts erected a traditional wayang structure as an open classroom for workshops and community storytelling.

As a complement to the allotment model, City Sprouts developed an integrated farming platform called Singapore Indoor Agriculture Platform in the old school hall. This platform serves as a knowledge center and testbed for indoor farms to pilot and formulate solutions in a safe environment with minimum risks. The first indoor farm partner is Singrow Pte. Ltd., a developer of innovative agrotechnology solutions for producing premium-quality and tropic-resistant strawberries. In their pilot 500m² facility, Singrow will be deploying their proprietary hydroponics rack and cultivation method to grow more than 10,000 strawberry plants with an expected annual harvest of 8-10 tons. Growing in a controlled environment means production will not be disrupted by seasonal changes thus ensuring consistent harvest all year round. This will enable them to deliver freshly harvested premium grade strawberries to local clients quickly and at affordable prices. Adjacent to the platform, City Sprouts has preserved the design and structure of the remaining hall space for community activations and events such as movie screening, agritech conferences, exhibitions etc.
City Sprouts overhauled the former canteen into an open air multi-purpose community space, with the canteen stalls redesigned into a unique food concept. This versatile space will enable City Sprouts and its partners to host community events such as educational seminars, farmers’ markets, and knowledge sharing workshops. These events and outreach programs are selectively curated to not only increase public awareness and foster empowerment about environmental and social issues, they seek to equip participants with relevant skills to take measurable actions. In view of the pandemic situation, City Sprouts’ plan is to resume their events and programs in phases starting from August 2020 onwards. They plan to begin with their weekly farm tours, monthly Farm Day Out (both family and junior versions). Furthermore, the food outlets operate with the overarching theme of fresh, local produce and sustainability. On top of exploring farm-to-fork initiatives, these outlets have been adopting eco-friendly packaging and contributing their food waste to City Sprouts’ in-house compost pile, which will then go back to our farmers for cultivation.

Additionally, City Sprouts’ sister company SGBC Member GWS Living Art, a specialist in vertical greenerzy is also housed in Sprout Hub. Having established its foundations in green roofs and green walls, GWS Living Art will be focusing on refining its technologies and products in its new headquarters. Through such a relationship, City Sprouts has and will continue to benefit from cross-collaborations in events and sustainable activations.