The Agile Fractal Grid: Our Story

Our Vision: to create a worldwide fractal (nested) network of independent, financially self-funding, and self-sustaining smart microgrids that are deployed organically.

Our Mission: to replace the world's huge, antiquated, and monolithic electric power grids which are highly susceptible to single point of failure disruptions and cyberattacks with a highly secure, self-healing, and state-of-the-art network of smart microgrids organized in a system of semi-autonomous tiers. Simultaneously, AFG will leverage the new decentralized power network to deliver ubiquitous gigabit broadband to consumers and businesses in the participating communities.

To achieve our vision and mission, AFG will work to achieve the following specific objectives:

- Create a practical, repeatable, and sustainable system and process for the rapid deployment of renewable power generation and the gigabit broadband infrastructure required to support it;

- Support local communities and their stakeholders in the implementation of their own fractal microgrids and communication systems designed with interchangeable components;

- Identify and recognize the unique set of assets, needs, opportunities, and goals that make each community unique;

- Develop, consummate, and employ a dynamic and responsive ecosystem of partner organizations including governmental agencies, energy distribution and transmission utilities, telecommunications carriers, local communities, universities, real estate organizations, and entrepreneurs that stand to benefit from the creation of fractal microgrids;

- Create, maintain, and operate the IOT platform of platforms required to deploy and operate the network of fractal microgrids that achieve end-to-end superlative reliability and resiliency;

- Incorporate end-to-end military-grade cybersecurity and cyber physical systems security, ensuring continuous authority to operate (ATO) to thwart attacks and advanced persistent threats from nation-state and other threat actors;

- Support local, regional, and national economic development through the establishment of a global system of independent, yet comprehensively networked centers staffed by subject matter experts across the broad range of technologies used with trained mentors who can train a new generation of practitioners in installing, operating, and maintaining the systems.

- Pursue all opportunities, at the local, regional, national, and international levels, to grow and expand the network.

- Employ energy optimization techniques to take advantage of new and unconventional revenue sources for sustainability, such as supporting the independent system operators (ISOs) with power for the energy imbalance market and ancillary services.

- Identify sources of funding for construction and sustainable business models, including revenue beyond energy, to ensure continuous operation and improvement.

The Tech-YOU-Topia Network: Our Story

Our Vision: To create a dynamic organization of independent, locally owned and operated, revenue generating, financially viable and sustainable community centers that support economic development through investing in people, technology, innovation, and entrepreneurship.

Our Mission: To fundamentally energize local and regional economic development, with special emphasis on rural America, through the development of a networked constellation of local centers (Tech-You-Centers) that support a 'Platform of Platforms' approach to empower people and communities to grow and excel. The Network will provide support to each local Center in the form of cutting-edge ubiquitous technology, a rich and diverse partner ecosystem and a set of novel and disruptive business models. As such, the TYT Network will provide near limitless opportunities for innovation and entrepreneurialism.

To fulfill our vision and mission, the TYT Network will work to achieve the following, specific objectives:

- Identify and assess the unique set of assets, needs, opportunities, and goals that make each community unique and use this information in the design of each Tech-You-Topia Center;

- Embracing the understanding that all TYT Centers will share structural similarities - but no two will be identical;

- Empowerment of local communities to maximize their existing assets to advance their economic development goals through innovation and experimentation;

- Steadfast adherence to the understanding that achievement of broad-based economic development, from the local to the national level, requires the support of human needs in the areas of education, holistic health, social interaction, cultural awareness, artistic exploration, and diversity and inclusion;

- Support the individual TYT Centers, and the TYT Network overall, by providing connectivity, communication, and ubiquitous technical support as well as the sharing of lessons learned;

- Create and maintain a network-wide learning management system (LMS) that supports skill and academic credential acquisition, curation of artifacts in multiple media, e-commerce, and expansion of the Network;

- Utilize a partner ecosystem, consisting of a broad array of businesses, corporations, governmental and quasi-governmental organizations, educational institutions, and not-for-profits to bring value to the TYT Network through collaborations, joint ventures, and strategic investments;

- Pilot new and disruptive business models in select locations within the TYT Network, that have the potential to be replicated and deployed in a sustainable manner across the Network;

- Support the sustainability of the TYT Network by the training of a self-perpetuating lineage of professional and technical persons able to operate, maintain, expand, and improve the systems and practices that provide for the smooth functioning of the Network;

- Pursue all opportunities, at the local, regional, national, and international levels, to grow and expand the network;

- Continuous engagement in the process of grant proposal preparation and submission to appropriate organizations and agencies for the purpose of acquisition of funds to enhance the mission of the Network.

http://Tech-YOU-Topia.org