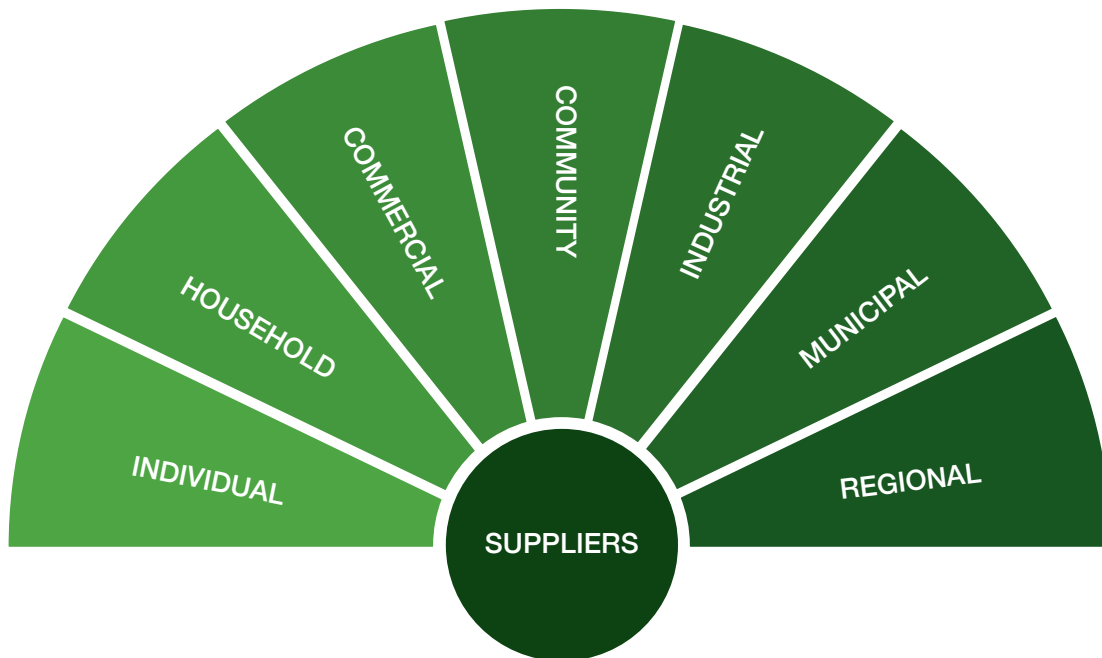




The Infrastructure Fan

The Infrastructure Fan is a graphical representation that divides the infrastructure sector into eight sub-sectors. It can be used as a framework to develop a scale-balanced investment methodology within the infrastructure sector.



Scale Targeted	Examples in Our Portfolio
<p>Individual Products and services for use by individuals</p>	
<p>Household Products and services to benefit the household</p>	
<p>Commercial Projects, products, or services targeting small and medium enterprises</p>	
<p>Community Distributed projects targeting isolated communities</p>	
<p>Industrial Projects, products, or services targeting large enterprises and industrial clients</p>	
<p>Municipal Projects targeting municipal clients</p>	
<p>Regional Projects providing solutions to regional infrastructure</p>	

Suppliers

Public equities and supranational green bonds in companies and institutions involved in the wide-scale adoption of energy efficient and climate-resilient infrastructure



The Infrastructure Fan

Philosophical framework: Modern Portfolio Theory (MPT), the widespread approach to portfolio risk management focused on *idiosyncratic*, or *correlation risk*, dates back to a 1952 paper by Nobel-prize-winning economist Harry Markowitz. MPT assumes that the best way to minimize this risk is to diversify, all other things being equal.

Diversification within any sector can be achieved through different methods (i.e. assets classes, geography, technology, etc.). The Infrastructure Fan represents a framework towards diversification that is centered on the user or customer of the technology.

Climate change presents a particular set of pressures on infrastructure-related investments. As sea levels rise and hurricanes intensify, all businesses that serve low-lying areas will suffer. As droughts become more frequent and wildfires more widespread, projects that operate in affected areas will fail. These changes also point to an *inevitable policy response*, in which governments, concerned by the rising costs of increasingly destructive weather events and pushed by constituents concerned about their long-term survival, pass regulations that severely restrict the operations of carbon-intensive sectors, leading to stranded assets on the one hand and a push towards eliminating net carbon dioxide emissions (the “net-zero economy”).

The Infrastructure Fan can be used as a tool to help identify those technologies, projects, and businesses best placed to lead to and lead in the net-zero emissions economy, to visualize the breadth of scale required for the changes needed, to diversify our portfolio effectively, and to focus our investment efforts accordingly, both to support this transition and to avoid the negative impacts that such policy transitions will have on the infrastructure sector as a whole.

References and Further Reading

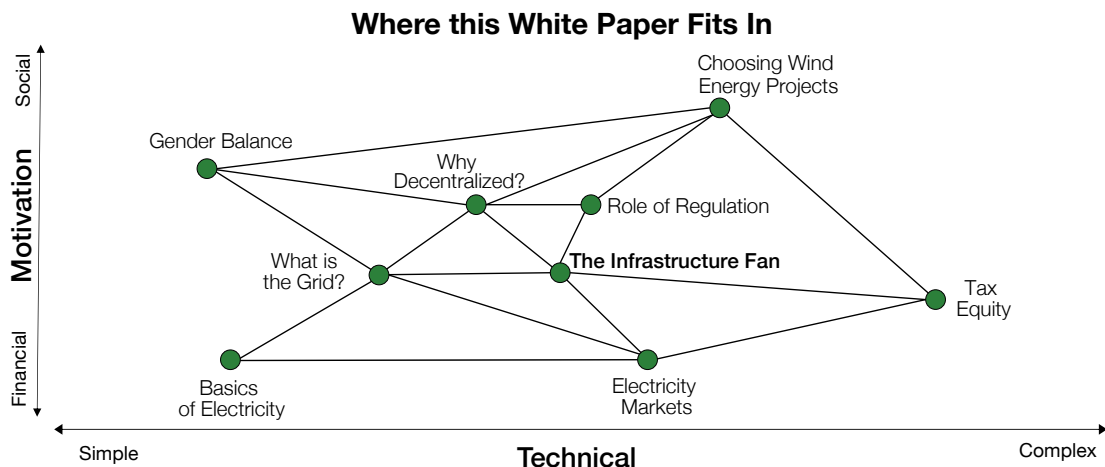
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About Treehouse Investments: Treehouse Investments is a minority-owned firm dedicated to addressing climate change. We are a family business, founded by a family from Puerto Rico. We target direct investments in both publicly traded and private entities. Our focus areas fall under the broad description of decentralized infrastructure: companies and projects that contribute to building sustainable and resilient energy, water, and waste systems.

