

Defining the Green Economy

WHAT IS THE GREEN ECONOMY?

There is no universally accepted definition of the green economy—indeed, it is a highly contested concept! *The Practical Guide* relies on a broad way of thinking about the green economy: by types of firms and actors, various technologies and approaches to transitioning to a green economy. Importantly, the green economy is not static; it is a transition, a range of dynamic processes that are generating new opportunities.

GREEN ECONOMY FIRMS AND ACTORS

The green economy includes **firms that make green products** (e.g., electric cars or wind turbines) or **use green processes** (e.g., using hydrogen fuel in manufacturing to reduce production

emissions) and actors who **generate and help to meet the demand** for green products and services (e.g., helping households access incentives to switch to solar).

GREEN ECONOMY TECHNOLOGIES

The green economy also includes the set of industries or technologies often referred to as climate tech or cleantech: renewable energy, batteries and energy storage, electric vehicles, circular economy (heat recovery, plastics recycling), building technologies (including energy efficiency), industrial process innovation (including green steel), hydrogen, sustainable fuels, carbon capture, utilization and storage, green agriculture and food production, and clean water and soil remediation.

HOW CAN A GREEN ECONOMY SUPPORT THE EVERYONE ECONOMY?

An inclusive green economic development strategy is not the same as a decarbonization strategy. Economic development involves a set of strategic choices about whether, where and how to apply resources in efforts toward capturing economic opportunity.

The question in front of the region: What is worthy of our collective focus?

Beyond the relative “greenness” of any approach, the potential outcome must matter for inclusive growth.

An inclusive economic development strategy must enable the region to retain current jobs and capture future ones, so there is future economic opportunity in the region. It must

consider who is likely to benefit from future economic opportunity and whether existing inequities are likely to be improved or exacerbated. It must also ask whether investments from economic development are likely to make a difference.


These considerations are the foundation of the three strategic imperatives for Northeast Ohio:

- **growing green job hubs**
- **future-proofing businesses**
- **maximizing community benefits**

The strategic imperatives were developed following a critical analysis of the ways an economy can become greener.

GREEN ECONOMY TRANSITION APPROACHES

The analysis considered: strength of market and policy forces, potential for economic growth, potential for economic inclusion, success conditions, regional awareness and strategic opportunity.

Approach	Transition Pathways	Actions
Switching to renewable energy sources	LARGE-SCALE GRID TRANSITION	<ul style="list-style-type: none"> • Renewable development • Purchase renewable energy • Carbon capture technology
	OFF-GRID SWITCHING	<ul style="list-style-type: none"> • Green hydrogen • Bio-fuels • Renewable natural gas • Small-scale nuclear
	MICROGRIDS 	<ul style="list-style-type: none"> • Business park microgrids • Community microgrids
Helping existing businesses use greener methods	CORPORATE PRACTICES 	<ul style="list-style-type: none"> • Emissions and climate risk goals • Change suppliers • Sustainability leaders network
	MANUFACTURING PRACTICES 	<ul style="list-style-type: none"> • Industrial energy efficiency • Cleaner energy sources • Recycled products (inputs/outputs) • Minimize waste
Creating and attracting new green businesses	BUSINESS ATTRACTION 	<ul style="list-style-type: none"> • Marketing • Improve business inputs
	SITE READINESS 	<ul style="list-style-type: none"> • Brownfield cleanup • Industrial symbiosis
	CLUSTER DEVELOPMENT	<ul style="list-style-type: none"> • Water, energy storage, materials
	STARTUP SUPPORT 	<ul style="list-style-type: none"> • Customized capital and coaching • Procurement (demand-pull) • Commercialization (universities) • Talent development
Helping consumers make better choices	HOME ENERGY EFFICIENCY 	<ul style="list-style-type: none"> • Increase tax credit awareness • Creative tax credit stacking • Pair solar with efficiency upgrades • Coordinate workforce training
	GREENER TRANSPORTATION	<ul style="list-style-type: none"> • Electric and hybrid vehicles • Low-carbon transit • E-bikes
	GREENER GOODS CONSUMPTION 	<ul style="list-style-type: none"> • Healthcare costs • Residential green energy • Local food systems

The remainder of this guide sets forth potential actions, organized by strategic imperative and tiered based on risk level. See pages 18-19 for a summary.



STRATEGIC IMPERATIVES

Transition Pathways

GREENING JOB HUBS

An abundance of green manufacturing projects are in search of tailored sites and supports. Clean industries can be rooted in communities.

Microgrid Transitions • Manufacturing Practices • Site Readiness Business Attraction

Tier 1: Fundamentals

Clear impacts, defined approaches and high chance of early wins. Necessary actions to compete in the green economy.

Certainty of value ●●●●●

Investment risk ●○○○○

Innovation potential ●○○○○

Tailor land readiness initiatives for the green economy. Identify potential locations for site control and capital stacking for readiness.

Tier 2: Cutting Edge

Potential for greater competitive advantage, but require more research or strategy development.

Certainty of value ●●●○○

Investment risk ●●●○○

Innovation potential ●●●○○

Maximize federal funding/finance and diversify energy mix to produce multiple green job hubs built out and marketed in the region.

Tier 3: Globally Distinctive

Opportunities to be a first-mover or nationally relevant model, but are speculative and require significant vetting.

Certainty of value ●○○○○

Investment risk ●●●●●

Innovation potential ●●●●●

Early knowledge exchange with practitioners and partner regions to promote circular and symbiotic regional clean industry.



FUTURE-PROOFING BUSINESSES

Firms need to develop green capabilities fast, and (for now) without supportive state policy, to compete in a new economic era.

Manufacturing Practices • Corporate Practices • Startup Support

Better-resourced and better-networked versions of existing business support organizations. Quickly deploy funding to existing organizations, create formal network to link those and other organizations.

Engage with local firms and leading national practitioners to refine understanding of needs and effective interventions, resulting in new, customized services to develop talent, improve processes, fund high-growth startups, and spur product innovation.

Objectively assess whether any one technology or cluster is worthy of the major multi-year investment required to attain national prominence, producing bold, high-risk investments in highly cluster-specific infrastructure and supports.



MAXIMIZING COMMUNITY BENEFITS

Now is the time to deploy green solutions at scale, creating jobs and building wealth. No more pilot projects.

Microgrids • Home Energy Efficiency Greener Goods Consumption

Build systems to promote incentives; technical assistance to increase uptake; support for energy developers to find sites and apprentices. Convene community organizations, find contractors positioned for growth, organize workforce development to determine demand/supply for relevant occupations.

Significant funding for green banks, inclusive workforce and business development initiatives. Organize funders to invest in green bank, promote clean energy deployment as economic development, tap national resources to scale workforce and business development programs.

Define and address state policy constraints and determine scalability of community-owned solar as a main form of neighborhood electricity.