

Renewable Energy Sourcing

GOAL:

Increase renewable energy generation capacity to the electrical grid system.

The electrical grid is an interconnected network for delivering electricity from producers to consumers across a region. The portion of the regional grid within Albemarle County is regulated by the Virginia State Corporation Commission and operated by two investor-owned companies—Dominion Power and Appalachian Power Company—and two member-owned cooperatives—Central Virginia Electric Cooperative and Rappahannock Electric Cooperative. While over half the energy produced in Virginia is derived from burning natural gas, less than 1% currently comes from solar and wind.⁶²

There are presently no utility-scale renewable energy systems located in Albemarle County. However, the Albemarle County Board of Supervisors has provided a path forward for utility-scale solar projects in the county via a Special Use Permit and has approved its first project.

The County will support the development of local renewable energy by improving local land use policies and practices, supporting Virginia legislation that facilitates expansion in the renewable energy sector, pursuing utility-scale investments to provide energy for County operations, and supporting the programs and initiatives of local utilities and renewable energy developers when there are public benefits. In supporting renewable energy projects at the utility scale, the County will also strive to maintain a holistic perspective that accounts for potential climate benefits and the health of our

local ecosystem. In doing so, we will prioritize roof tops, parking lots, brownfields, landfills, and post-industrial or other open lands over forested or ecologically valuable lands for siting utility-scale renewable energy installations.

CO-BENEFITS

Renewable energy sourcing on a utility scale brings a number of benefits, some of which are shared with the installation of on-site renewable energy generation (see Buildings). Renewable energy utility construction and maintenance creates jobs in the clean energy sector that are inherently based locally or regionally. Local community renewable generation (e.g., solar gardens) can increase the electricity-generation capacity of the regional grid and bolster the resilience of the electric grid when demand is high or when storms damage transmission lines. In some cases, renewable energy generation can provide a supplemental income source for large landowners who lease part of their property to a local utility to build and operate renewable energy systems.

EQUITY

Potential benefits to equity from utility-scale renewable energy generation can include the creation of green jobs and, in the case of community solar, energy independence. As power generation transitions from polluting and emissions-producing fossil fuels to clean, renewable energy, many good jobs will be created. Policies

can encourage and incentivize equity in project bids so that businesses owned by women and people of color are equitably represented. Where local communities can start community-scale renewable energy generation, they may be able to gain greater energy independence and resilience in the face of power outages from weather events and demand spikes due to climate change.

Access to renewable energy among historically marginalized communities is key to realizing the benefits equitably. “Decisions regarding where renewable energy is built, who has access to it, and who is hired to construct it, affect whether the energy system is equitable.”⁶³ If support for renewable energy projects focuses on areas where affluent populations are likely to benefit first, existing inequities will be worsened. Consulting historically marginalized communities will be crucial to an equitable renewable energy transition, given a long history of siting pollution-heavy utilities close to lower income communities and communities of color, adversely affecting health and quality of life.⁶⁴

RENEWABLE ENERGY SOURCING: STRATEGIES & ACTIONS

STRATEGIES	ID	ACTIONS	TIME FRAME
Enable and incentivize utility-scale renewable energy projects in the County Code and during the community development regulatory process.	R.1.1	Establish a County policy clarifying this strategy to enable and incentivize utility-scale renewable energy projects, incorporating holistic analysis of local impacts on equity and environment.	immediately actionable
	R.1.2	Review the building, zoning, subdivision, land use, and tax sections of the County Code for opportunities to better facilitate and incentivize renewable energy projects. Encourage and prioritize the use of roof tops, parking lots, brownfields, landfills, and post-industrial or other open lands over forested or ecologically valuable lands.	assess opportunities
Partner with utilities and renewable energy companies to increase local renewable energy and energy storage initiatives.	R.2.1	Develop a policy to support utility-scale renewable energy projects.	initiate planning
	R.2.2	Support and promote programs within the 2020 Virginia Clean Economy Act and Governor's Executive Order #43; including Regional Greenhouse Gas Initiative (RGGI), Renewable Energy Portfolio Standards, Power Purchase Agreements, net-metering, and shared/multi-family solar.	initiate planning
	R.2.3	Conduct a study in cooperation with renewable energy companies to identify locations for utility scale projects in Albemarle County. Prioritize the use of roof tops, parking lots, brownfields, landfills, and post-industrial or other open lands over forested or ecologically valuable lands.	assess opportunities
	R.2.4	Provide financial incentives to promote private renewable energy investments.	assess opportunities
Invest in utility-scale renewable energy and energy storage to meet energy needs of local government operations as allowed under Virginia code.	R.3.1	Assess issuing a Request for Proposal (RFP) for a renewable Power Purchase Agreement (PPA).	initiate planning
	R.3.2	Partner with utility companies to research energy storage systems and make recommendation for County-owned facilities including vehicle-to-grid and battery storage options.	assess opportunities

RENEWABLE ENERGY SOURCING: STRATEGIES & ACTIONS (CONTINUED)

STRATEGIES	ID	ACTIONS	TIME FRAME
Promote and facilitate investment in utility-scale renewable energy by the private sector.	R.4.1	Assess financing mechanisms applicable to utility-scale renewable energy.	assess opportunities
	R.4.2	Assess funding opportunities to support a Clean Energy Loan Fund program applicable to utility-scale renewable energy.	assess opportunities
Increase community awareness about utility-scale renewable energy.	R.5.1	Develop a multi-media informational campaign; as appropriate, partner with other local government agencies, educational institutions, non-profits, and utilities.	initiate planning
	R.5.2	Support community efforts to share information about utility-scale renewable energy.	initiate planning
	R.5.3	Increase informational programs on renewable energy generation and climate change for local government and public school staff.	initiate planning
	R.5.4	Increase access to information and resources on renewable energy generation and climate change for teachers and students in public schools.	initiate planning
Advocate for Virginia legislative actions to support utility-scale renewable energy.	R.6.1	Align County Board of Supervisor's legislative priorities with those of other agencies influencing the state legislature, e.g. Virginia Association of Counties and Virginia Municipal League.	initiate planning



Rooftop solar installation at Baker-Butler Elementary School in Albemarle County.



Rooftop solar installation at Mary Carr Greer Elementary School in Albemarle County.



Rooftop solar installation at Brownsville Elementary School in Albemarle County.