# **ENERGY RESILIENCE**

WHY IT'S IMPORTANT FOR YOUR COMMUNITY



## WHAT IS ENERGY RESILIENCE?

Think about the last time the electricity went out in your home. Did you have to stumble around in the dark looking for a flashlight? Maybe you couldn't cook dinner or charge your phone. Now, imagine if this happened frequently or lasted for days. **Energy resilience aims to prevent these disruptions and keep our lives running smoothly.** 

## **HOW DO POWER OUTAGES AFFECT DIFFERENT COMMUNITIES?**

Power outages can be particularly challenging for communities. In some case, losing power is not just an inconvenience but real danger. **Energy resilience helps ensure everyone can maintain a safe and stable living environment**,

# PERSONAL BENEFITS OF ENERGY RESILIENCE



#### **Reliable Power Supply:**

Reliability reduces blackouts and improves consistent energy supply.



#### Safety and Comfort:

A resilient energy system better ensures heat during a cold snap and air conditioning during a heatwave. This is especially important for vulnerable groups like the elderly, young children, and those with medical conditions that require consistent power.



#### **Cost Savings:**

Energy-efficient and resilient systems can reduce your energy bills. Solar panels can lower costs and home batteries provide backup power during outages, making energy more affordable.

# HOW DOES YOUR COMMUNITY BENEFIT?



STRONGER EMERGENCY RESPONSE





IMPROVED LOCAL ECONOMY

ENVIRONMENTAL PROTECTION



# COMMUNITY BENEFITS OF ENERGY RESILIENCE VIRGINIA ENERGY RESILIENCE STUDY (VERS)

#### What is the Virginia Energy Resilience Study?

The Virginia Energy Resilience Study (VERS) is working with communities across the state to measure their energy resilience and identify practical long-term solutions to reduce or eliminate vulnerabilities.

#### How will energy resilience be measured?

To measure community energy resilience, we'll answer these key questions:

- What weaknesses exist in your local power sources?
- How do power outages impact your energy supply and affect essential services and household needs?
- What is the financial cost of power outages to your community?

#### What will you learn?

By answering these questions, you'll gain insights into:

- Where energy improvements are needed
- Practical solutions to reduce or eliminate weaknesses
- Long-term solutions to meet your energy needs

#### How will your community benefit?

Your community will:

- Receive an energy resilience profile to help you understand your specific vulnerabilities and ways to reduce them and
- Be invited to apply for one of ten solar plus storage case study design projects where you will receive a customized engineering design for an energy resilience hub.

# **INTERESTED IN JOINING THE STUDY?**

An Energy Resilience Hub is a community-serving facility that provides reliable access to power.

# **Community Benefits of a Resilience Hub**



#### **Resilient Power**

Resilience hubs can generate their own electricity when the rest of the community is without power.



#### **Health Services**

Resilience hubs can offer health services and power the equipment needed to prepare, serve, and store meals and drinkable water and refrigerate medical supplies.



#### **Temperature and Air Quality**

Resilience hubs can provide air conditioning, heating, or air filtration during times of extreme heat or cold and poor air quality.



#### Emergency Management Coordination

Resilience hubs can provide reliable power to support emergency services during a power outage.



#### **Overnight Shelter**

Resilience hubs can provide temporary shelter for displaced community members.