



### **Energy Access**

November 20<sup>th</sup>, 2019





# GCoM Guidance on Energy Access



## **UN's Sustainable Development Goals**

### **SUSTAINABLE DEVELOPMENT GOAL 7**

Ensure access to affordable, reliable, sustainable and modern energy for all

By 2030, ensure universal access to affordable, reliable and modern energy services

By 2030, increase substantially the share of renewable energy in the global energy mix

By 2030, double the global rate of improvement in energy efficiency



## **GCoM Commitment**

To provide access to secure, sustainable and affordable energy for all.

In the European context, this means taking action to alleviate energy poverty.





### **Energy Poverty is**

"a situation where a household or an individual is **unable to afford basic energy services** (heating, cooling, lighting, mobility and power) to guarantee a **decent standard of living** due to a combination of low income, high energy **expenditure and low energy efficiency of their homes**" – European Commission, Citizens' Energy Forum 2016



## The Energy Poverty Challenge in Europe



57 million people in Europe cannot keep their homes warm<sup>2</sup>



104 million people in Europe cannot keep their homes comfortable during summer<sup>2</sup>



52 million people in Europe face delays in paying their energy bills<sup>2</sup>



10 million people need to walk more than 30 minutes to access public transport facilities<sup>3</sup>



## How Can Signatories Tackle Energy Poverty?

- Financing improvements in the energy efficiency of households
- Minimum energy efficiency standards in buildings
- Free of charge energy audits & advice for low income households
- Reducing energy bills via social tariffs or energy bill subsidies
- Disconnection protection during the winter months
- Information & awareness raising on energy & climate issues
- Improvement of the accessibility to public transport connections
- Insulation of vulnerable facilities to protect against cold & heat, possibly accompanied by green solutions at neighbourhood scale



## Where to Start?



#### Choose your target groups

(chronically ill, disabled, pensioners or children, poor families, ...)



Consider possible spatial patterns (areas with poor quality buildings, poorly accessible areas, ...)



Analyse energy carriers and the related costs and efficiency (e.g. heating oil, natural gas,...)



Define the type of policy

(building retrofitting, awareness raising, mobility improvements, financial support, ...)



### **Energy Access Plan**

#### Mandatory (future requirement):

• Report on energy access plans; detailed reporting framework is still being defined by GCoM.

Energy access refers to "access to secure, sustainable, and affordable energy." An Energy Access Plan typically includes the following three components:

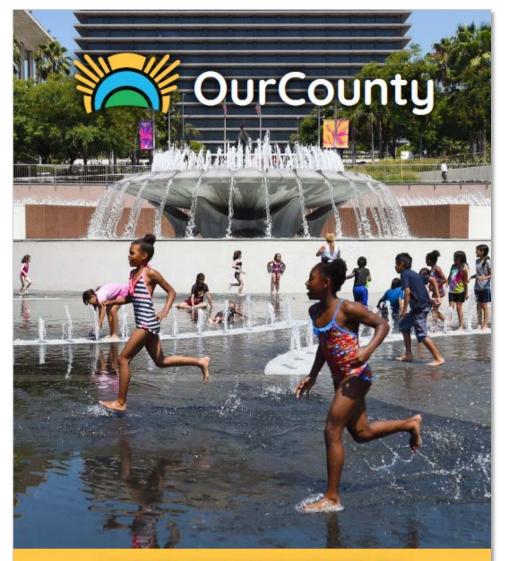
- Access to secure energy: Reduce energy demand, diversify the energy mix with the largest possible share of renewable energy sources, and lower dependence on imported energy and diversify energy supply sources.
- 2. Access to sustainable energy: Provide access to grid-based and decentralized renewable energy. Ensure that, where there is currently no access to energy, renewable energy sources are considered first.
- **3.** Access to affordable energy: Utilize policies, including subsidies or other incentive mechanisms, to promote access to renewable energy systems and energy efficiency and conservation.



### **Example:**

# Los Angeles County Sustainability Plan





Los Angeles Countywide Sustainability Plan

Los Angeles County recently approved a Countywide Sustainability Plan with a focus on equity.

While it's scope is broader than "energy access," the Plan prioritized equity across all topic areas and made an effort to define and provide a framework for assessing equity throughout the Plan.



#### Terminology

In this document, we use a variety of terms when referring to historically impacted communities including

"low-ind where d

**low-income communities** 

communities," which alights with the definitions used by the State of California and other entities. One way that the State identifies the "disadvantaged" geod areas that most suffer from a combination of eco

health, and environmental burdens is through

Environmental Health Screening Tool, better known as CalEnviroScreen.

We also somet when discussing

vulnerable populations

sometimes but not always geographically defined and

#### disadvantaged communities face the gr shocks, incl

These include, but are not limited to, youth, older adults, women, LGBTO+ individuals, Native American people, documented and undocumented immigrants, people with disabilities and chronic illnesses, people

communities of color

ms of domestic violence experiencing linguistic hose with limited access

of an analytical tool called the California Communities to transportation, critical infrastructure, or municipal services.

> pr a full list of terms and definitions used within this cument, please refer to the glossary in Appendix IV.



#### What do we mean by equity?

Equity is an end state in which all groups have access to the resources and opportunities necessary to improve the quality of their lives. OurCounty uses the following framework:

Procedural Equity: inclusive, accessible, authentic engagement and representation in processes to develop or implement sustainability programs and policies.

 Example: OurCounty is actualizing procedural equity through its work with community-based organizations to engage stakeholders in the development and implementation of OurCounty's goals, strategies, and actions.

Distributional Equity: sustainability programs and policies resulting in fair distribution of benefits and burdens across all segments of a community, prioritizing benefits to those communities with highest need.

 Example: Departments will advance distributional equity by assessing the distribution of resources and opportunities, and prioritizing investments and services in communities where there is poor access to resources and opportunities.

Structural Equity: sustainability decision-makers institutionalize accountability: decisions are made with a recognition of the historical, cultural, and institutional dynamics and structures that have routinely benefited privileged groups and resulted in chronic, cumulative disadvantage for subordinated groups.

 Example: Structural equity is embedded into OurCounty through its commitment to regularly report on implementation efforts and promote transparent, inclusive decision-making.

Transgenerational Equity: sustainability decisions consider generational impacts and don't result in unfair burdens on future generations.

 Example: OurCounty actions will provide near- and long-term social, environmental, and economic benefits.

The above principles will help ensure that OurCounty sustainability efforts have equitable impacts, but we must also deal with the inequities that already exist. In acknowledgment that structural racism has harmed people of color across all categories of social and physical well-being. OurCounty is aimed at achieving an end state in which race can no longer be used to predict life outcomes, such as educational attainment, employment, or health status. Strategies and actions throughout this document have been and continue to be developed with racial equity as a central consideration.

#### **Distributional Equity:**

Sustainability programs and policies resulting in fair distribution of benefits and burdens across all segments of a community, prioritizing benefits to those communities with highest need.

**Example**: Departments will advance distributional equity by assessing the distribution of resources and opportunities, and prioritizing investments and services in communities where there is poor access to resources and opportunities.



#### Strategy 1D

### Ensure household utility affordability

Energy and water are essential to life in Los Angeles. The County will advocate for and evaluate best practices to ensure household utilities are affordable to all, especially as the County and its stakeholders invest in building upgrades and renewable energy. LA County households are more burdened by utility costs than other areas in the state, primarily due to higher energy and water costs and lower median household incomes.

Water rates vary significantly across the County depending on the provider or location; lower-income residents often face higher rates without ample protection, limiting their financial stability and their economic mobility. As we make investments, we must protect our residents from exorbitant utility costs while ensuring everyone can benefit from zero-carbon, resilient energy and water sources.

#### Countywide:

#### Baseline:

Data on enrollment of eligible households in rate-assistance programs will be collected as part of the implementation of OurCounty.

Targets

Action 16: Study and implement best practices to maximize program enrollment and benefits in low-income rate assistance, energy efficiency and conservation, and renewable energy rebate and incentive programs, including proactive strategies to include:

- · Renters;
- · People with disabilities;
- Undocumented immigrants;
- People with limited English proficiency, and;
- Other communities traditionally left out of those programs.

Horizon	Short-to-Medium Term
Sphere of influence	Indirect
Lead County entity	Utilities
Partners	CEO, CEC, DPSS
Topic Tags	Climate, Energy, Equity, Public Health, Funding & Financing

#### Strategy 7A

#### Transition to a zero-carbon energy system that reduces air and climate pollution and that minimizes the dangers of a changing climate to our communities and economy

The region's energy supply depends heavily on fossil fuels that exacerbate the effects of climate change and impact air quality in our communities. OurCounty will support improvements to the supply systems throughout the County, including local renewable energy generation and improved infrastructure to accelerate the shift towards zero-carbon energy. This transition includes increased reliance on local water sources, alleviating the large amount of energy spent transporting water into the area and pumping it from distant aquifers.

These improvements will allow our energy-supply infrastructure to be more resilient to climate impacts as it moves away from carbon-based fuels towards zero net emissions of greenhouse gases (i.e., carbon neutrality). OurCounty will work to ensure these improvements are crafted so that all residents can share in their benefits.

#### Countywide:

#### Baseline:

Countywide greenhouse gas (GHG) emissions totalled 105 million mtCO,e in 2015.1

LA County had a total of 894 MW of installed distributed energy-generation capacity as of 2018.<sup>2</sup>

#### 2025 Targets:

Achieve a 25% reduction in total greenhouse gas emissions

3 GW of new distributed energy resources

#### 2035 Targets:

Achieve a 50% reduction in total greenhouse gas emissions

6 GW of new distributed energy resources

2045 7-----

2

Action 86: Develop a publicly-accessible community energy map that identifies opportunities for deploying distributed energy resources and microgrids in order to improve energy resiliency in disadvantaged communities.

Horizon	Short Term
Sphere of influence	Indirect
Lead County entity	Chief Executive Office
Partners	PW, Utilities
Topic Tags	Air Quality, Climate, Energy, Equity, Public Health, Resilience





## **Metro Washington Examples**





DC SUSTAINABLE ENERGY UTILITY













VIRGINIA DEPARTMENT OF SOCIAL SERVICES















### 2020 Regional Climate and Energy Action Plan

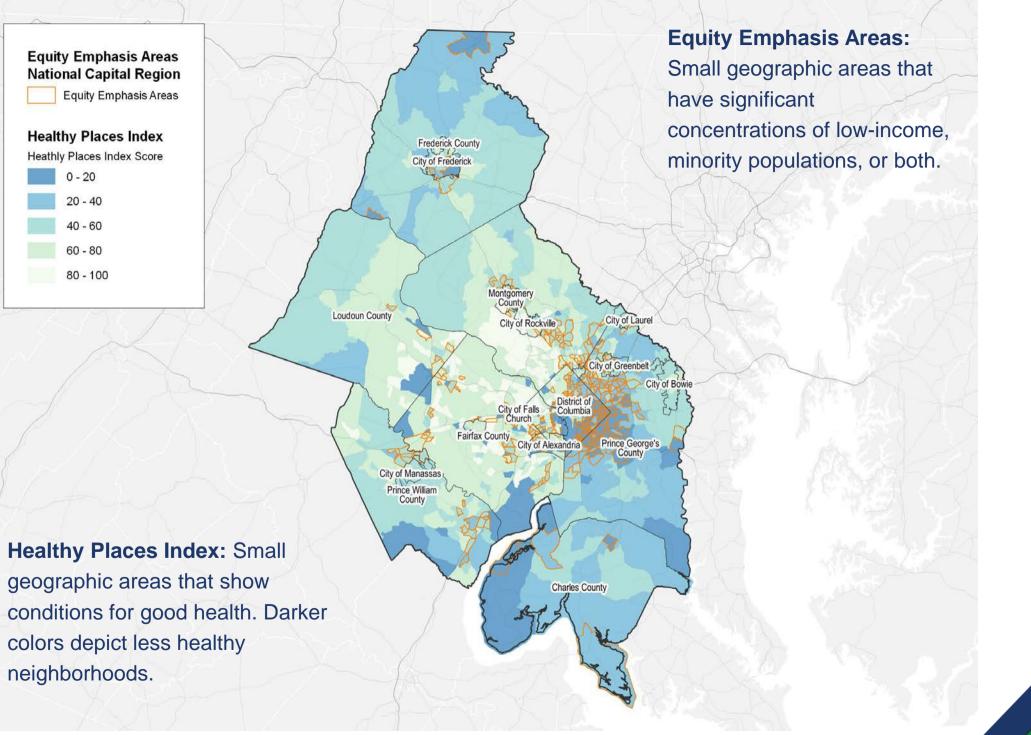
Encourages local governments to implement actions such as:

- Energy efficiency improvements for affordable housing.
- Incentives for energy efficiency, renewable energy and energy storage systems.
  Ensure opportunities are accessible by vulnerable populations.
- Implement local government energy assurance planning initiatives. Direct assistance (technical and financial) and innovative solutions to vulnerable populations.
- Integrate equity and health considerations and strategies into climate and energy policies, plans, and programs.
- Identify impacts of policies and programs to underserved populations and communities and how to maximize positive impacts and minimize negative impacts.



# What does "Energy Access" mean for the Metro Washington region?

# What collaborative actions are needed to further improve "Energy Access?







# Thank you