

# City Energy Strategy

## 2021 - 2025



THE CITY OF  
**PITTSBURGH**

**Department of City Planning**  
As Approved in May 2021

## Contents

Executive Summary .....	2
Background.....	2
Purpose .....	3
Pittsburgh's Energy Vision .....	4
Climate goals .....	5
Pittsburgh's Energy Strategy.....	5
Process.....	5
Energy Themes & City Commitments.....	6
Built Environment (BE).....	7
BE-1. Expand the Performance Points System.....	7
BE-2. Expand the Performance Targets Program Citywide .....	8
BE-3. Integrate building performance into review processes and codes .....	9
BE-4. Expand Green Building Advisory Reviews.....	9
Infrastructure (I) .....	10
I-1. Integrate energy planning into Citywide Comprehensive Plan.....	10
I-2. Long range infrastructure planning with utilities.....	10
I-3. Undertake program of energy master planning city- and district-wide .....	11
Efficient City (EC) .....	12
EC-1. Integrate energy and sustainability into City operations.....	12
EC-2. Create standards for energy infrastructure .....	12
EC-3. Engage communities on the topics of energy future and energy burden.....	13
EC-4. Provide data to integrate energy performance into more sectors.....	14
Governance (G) .....	14
G-1. Establish the Climate and Energy Advisory Committee .....	14
G-2: Evaluate the creation of Energy Improvement Districts .....	15
G-3. Evaluate the creation an energy authority or equivalent.....	15
Implementation.....	16
Why Create an Energy Delivery Unit?.....	16
What is the Purpose of the Energy Delivery Unit?.....	16
What is the Climate and Energy Committee?.....	16
Why is the Climate and Energy Committee Valuable?.....	16
What are the 2021 Targeted Activities for the Delivery Unit? .....	16
Appendix.....	18
Other Plans Referenced in the Energy Strategy .....	18
Acronyms .....	18

## Executive Summary

In the City of Pittsburgh's latest Climate Action plan, the City established an ambitious target of reducing greenhouse gas emissions from transportation by 50 percent from the 2003 emission levels by the year 2030. To reach this goal, the City will utilize existing technologies that impact energy generation and distribution, buildings and transportation, as well as integrate greenhouse gas reduction into their review processes. The Department of City Planning is uniquely positioned to usher in an energy transition that not only lowers carbon emissions, but provides equitable access to safe, clean and reliable energy and mobility resources. By improving long-term planning and coordination between utilities, permitting, and developers, the City's planning department can help improve the delivery of lower-carbon energy sources, construct higher-performing buildings, integrate renewable energy generation, and activate fuel and modal shifts within the transportation sector.

The Pittsburgh Energy strategy was developed to establish a framework to integrate these greenhouse gas reduction considerations into the Department of City Planning's project review processes. It is based on generally-accepted principles acknowledging the energy sector's responsibility to address mitigation of carbon dioxide emissions and their duty to prepare for the impacts of climate change. These principles include:

- Reducing energy consumption
- Addressing transmission loss by enabling local power generation within close proximity of consumption
- Transforming fuel-consuming assets to electrical or zero-carbon producing technologies
- Enabling the procurement of clean energy sources

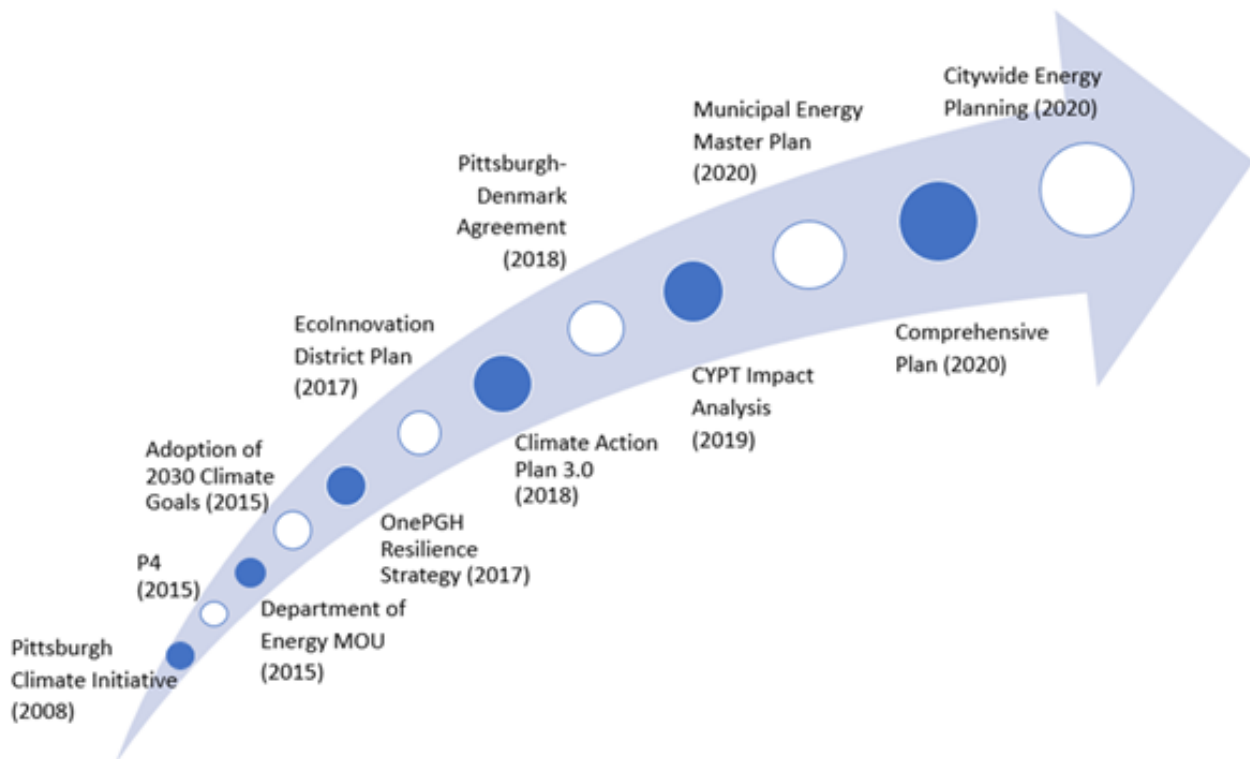
The Energy Strategy plan lays out a four-year scope of work with a planned two-year midpoint review. It also addresses the necessity of structural incentives in the development process. The tools identified in this framework include performance points system for buildings, transparent utility consumption data, asset coordination, improved governance, management structures and leading by example through city operational assets.

## Background

Thanks to Pittsburgh's p4 framework, a unifying framework created in 2015 to focus on "People, Planet, Place and Performance," the City's innovation economy is uniquely situated to encourage economic success that is inclusive, just and climate-friendly. Since 2014, the City of Pittsburgh has implemented a number of integral strategies that forward the development of a more sustainable and resilient energy system (See Figure 1). OnePGH, the City's resilience strategy, aligned stakeholders and built support for inclusive change and growth in 2017. The Climate Action Plan (version 3.0 released in 2018), established the City's ambitious goal of reducing carbon emissions measured in 2003 by 50% by 2030 along with other operational goals for public buildings, city management and the City's vehicle fleet.

In partnership with the 100 Resilient Cities Program, the City of Pittsburgh completed the Siemens City Performance Tool Analysis (CYPT) in 2019. This study identified opportunities for the City to target specific investments in energy infrastructure that could lead to emissions reduction, increased resilience and economic development. It recognizes the City's potential to reduce carbon emissions by 50 percent while simultaneously providing opportunities for improving Pittsburgh's air quality and creating 110,000 full-time equivalent (FTE) positions. CYPT suggests that new FTE positions would be created by leveraging existing capital investments in the region, and transferring those investments to low carbon technologies. These technologies include district heating implementation, rooftop photovoltaic, increasing electric vehicles, updating existing buildings and creating incentives that promote active transit and solar generation. Of these technologies, district heating and rooftop PV have been identified as the most effective because of their high-scores in delivering on climate targets, air quality improvements and job creation.

**Figure 1:** Timeline of Pittsburgh's Climate and Energy Action to Date



## Purpose

This strategy intends to take a collaborative approach to defining short- and long-term actions that will help the City reach its goals outlined in the Climate Action Plan. It presents existing energy-related plans and fuses them with city goals by presenting them through an urban land use, planning and development lens. To accomplish these goals, the City will:

1. Integrate energy planning into development review to ensure the equitable distribution “clean” renewable energy and its benefits which include increasingly efficient, reliable, cost effective systems, as well as potential for the creation of regional employment opportunities.

Many cities are faced with the challenge of addressing climate change and systemic economic inequality simultaneously. As these cities transition to a cleaner, more compact, and distributed energy systems, cities must work collaboratively in the planning & design process to make development decisions that ensure equitable access.

2. Evaluate energy system decisions early in the planning process to help yield an improved operating environment for residents, building owners, and building occupants. This early evaluation allows the City to identify challenges, mitigate issues, and operationalize opportunities early at the onset of projects.
3. Display the cumulative impact of strategies that have significantly impacted the evolution of Pittsburgh’s infrastructure, and establish Pittsburgh as an example for other transitioning cities that could benefit from shared experiences. The City invests a great deal of time, effort and resources into investigations and tools to improve its communities. Other cities with similar conditions can benefit from these efforts.

## Pittsburgh’s Energy Vision

*Create a livable and sustainable Pittsburgh that meets its 2030 climate targets through carbon reductions, air quality improvements, job creation, clean energy technologies, and lower energy burden to create a Pittsburgh for all.*

Pittsburgh’s Energy Vision seeks to achieve a just and equitable energy transition through equitable workforce development and a circular ecosystem, as laid out by Pittsburgh and its partner cities, as outlined in the Marshall Plan for Middle America (MP4MA).

This vision also connects directly to the United Nations Sustainable Development Goals (SDGs), specifically: Affordable and Clean Energy, Decent Work and Economic Growth, Sustainable Communities, and Climate Action. Through developing community-driven neighborhood plans and working with developers to create sustainable decisions in development review processes, the City can work towards energy transition and advance the SDGs.

**The Marshall Plan for Middle America (MP4MA)** was released in 2020 in partnership with the University of Pittsburgh’s Center for Sustainable Business, seven Ohio River Valley cities and local labor/community leaders. It connects developed tools, regional employment data and climate action plan concepts to demonstrate environmental, social and economic impacts related to a transition to clean energy resources.



## Climate goals

The City of Pittsburgh aims to halve its carbon emissions by 2030. This ambitious strategy includes the implementation of district energy systems, an increase in electric vehicles, decarbonization of electricity and heating systems, energy efficient upgrades to new and existing buildings as well as incentives to promote an active mobility and public transit system.

The Climate Action Plan 3.0 states the following targets for energy consumption City-wide in order to improve air quality and reduce energy burden for residents.

**20% GHG Reduction by 2023**

**50% GHG Reduction by 2030**

**80% GHG Reduction by 2050**

Greenhouse Gas emission reduction will mainly be focused within the following three sectors:

- Energy Generation and Distribution
- Buildings and End Use Efficiency
- Transportation

These sectors were selected because climate actions taken in each sector create opportunities for economic development and new green jobs across Pittsburgh.

## Pittsburgh's Energy Strategy

The opportunity to implement climate and economic development strategies such as, district heating, vehicle electrification and beyond, relies upon all city decision makers and stakeholders including architects, engineers, real estate developers, planners and other professionals. Failure to do so will stunt the City's progress towards achieving its CAP goals; therefore, Pittsburgh's Energy Strategy enforces the need for collaboration among partners and focuses on facilitating information exchange and providing educational and training opportunities for the City's boards, authorities, commissions and partners.

Climate Action Plan 3.0 recognizes the importance of district scale energy systems and distributed energy resources as critical tools to improve efficiency for real estate development in the most energy dense urban areas. To coordinate this level of energy infrastructure citywide, the City of Pittsburgh proposes taking the following measures to educate its decision makers and integrate clean energy into the choices that are made in the built and natural environment.

## Process

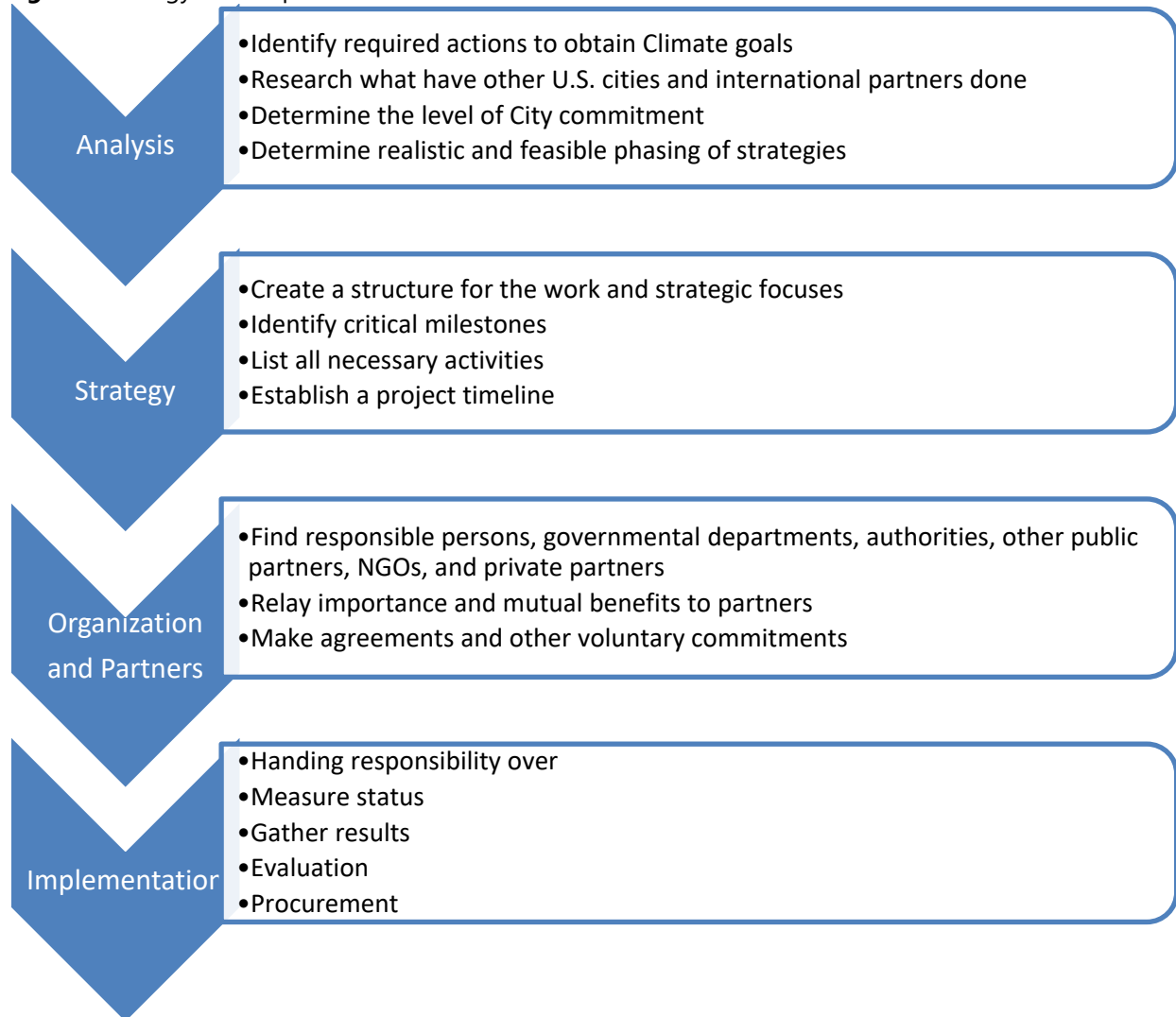
To accomplish the City's vision of economic resilience through green energy, Pittsburgh will deploy a variety of individuals identified as sector-based knowledge experts, and assemble them into Delivery Units (DUs) to work on specific initiatives organized as part of one of four key Department of City Planning themes:

1. Built Environment
2. Infrastructure

3. Governance
4. Efficient City

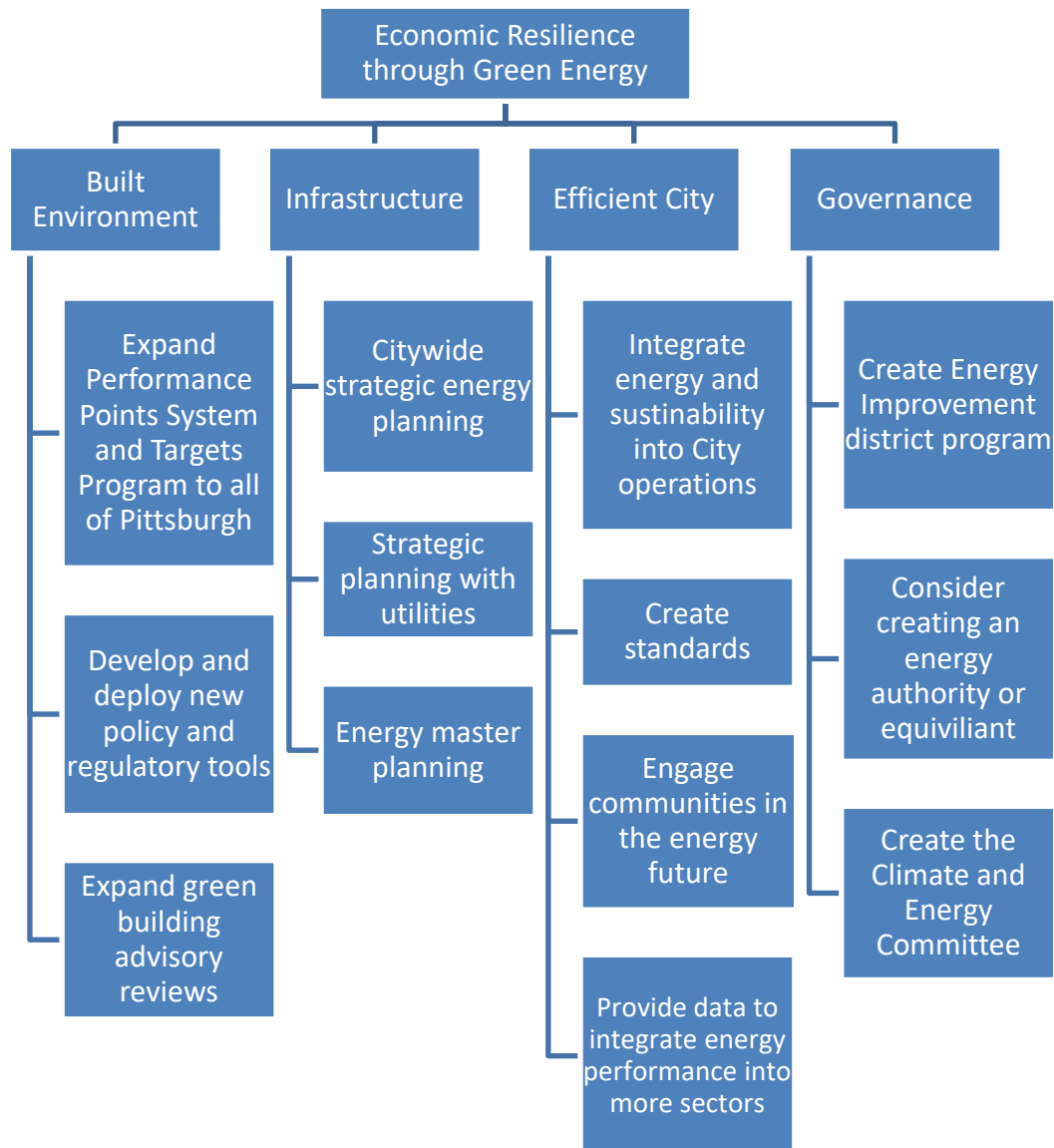
The DUs will be tasked with working through the four-step process (Figure 2) to ensure Pittsburgh's energy plans are implemented.

**Figure 2:** Energy Plan Implementation



## Energy Themes & City Commitments

The Department of City Planning has identified key themes and specific initiatives that will maximize the impact of planning processes using existing resources (Figure 3). The City of Pittsburgh is committed to activating and/or expanding each of these initiatives.

**Figure 3:** Energy Themes & City Commitments

### Built Environment (BE)

What measures can be implemented to improve the performance of buildings and campuses?

#### BE-1. Expand the Performance Points System

The Performance Points System is a regulatory tool in Pittsburgh's Zoning Code originally developed for the Ecolnnovation District Plan in 2017 and has since been expanded to all riverfront areas. It allows developers to earn building height and other benefits by meeting specified goals through a predictable process that can be integrated into project development. The specified goals address areas of importance such as energy efficiency, generating electricity with on-site renewables, connecting to district energy, stormwater management, and transit-oriented development. By expanding the Performance Points System citywide, developers have



flexibility to decide what goals work for their project, while still improving their performance in the built environment.

#### *Actions*

- Identify areas of the city where bonus height and building density is desired, using the Citywide Comprehensive Plan and adopted neighborhood plans. Then, amend the Zoning Code in the identified areas to allow for bonus height through the Performance Points System.
- Update the existing Performance Points System to reflect new knowledge gained from experience over the past four years, related programs (such as the Stormwater Code), and ordinance updates.
- Continuously improve alignment with P4 goals, Sustainable Development Goals, and the Performance Targets Program.
- Develop boundaries and determine applicable points with community organizations in areas where points are being applied.
- Encourage a smooth and timely expansion of the Performance Points System through increased training and staff capacity.

**Partners:** GBA (see Appendix for list of acronyms)

#### **BE-2. Expand the Performance Targets Program Citywide**

The Performance Targets Program allows experts from the Green Building Alliance, multiple public departments and agencies to collaborate with institutions and developers of large-scale projects to achieve buildings and campus performance that goes beyond what is required in the Zoning Code.

The Targets Program focuses on campuses because they make up a large portion of the City's land use and energy consumption. To date, the Department of City Planning has been able to establish sustainability at a district scale in new and innovative way through a series of meetings with UMPC, Duquesne University, Carlow University, and the University of Pittsburgh.

#### *Actions*

- Establish clear staff roles in order to increase capacity for coordination, inter-meeting work and tracking outcomes through formal development review.
- Determine thresholds such as square footage, projected energy use intensities, or zoning districts to more effectively target the program's resources.
- Develop a communications strategy to share outcomes, track impact and create an understanding of the program's benefits.
- Educate City committees and boards such as the Planning Commission about the program to encourage collaboration from application to approval and implementation.

**Partners:** GBA, DOMI, PAAC, and PWSA

### BE-3. Integrate building performance into review processes and codes

In 2018, Pittsburgh began the process of benchmarking for non-residential buildings larger than 50,000 square feet. Now, the City is working to create a framework that supports energy retrofits in order to achieve 50% energy reduction. This means integrating energy disclosure into all scales and types of development in the earliest stages of the planning review process through permitting activities with PLI and commissioning and post commissioning reporting.

#### *Actions*

- Create a framework for how all types and scales of development are reviewed and incentivized by City departments. This includes privately-funded developments, publicly funded projects and those built on publicly-owned property.
- Establish a rolling program to implement changes that can have large impacts to development review processes and Zoning Code.
  - Pilot changes in energy-intensive areas that will have the biggest impact such as Oakland, Downtown, and the Strip District.
  - Streamlining development review and other low/no-cost development incentives for developments designing beyond current code should be included.
  - Include a process for Home Energy Audits.
- Identify pre-emption issues of State rules (e.g., Energy Code, Building Code, tax credits) and advocate for the inclusion of new energy standards at the state or local level.

**Partners:** GBA, PLI, DOMI

### BE-4. Expand Green Building Advisory Reviews

Green Building Advisory Reviews provide developers with information and resources they can use to create more sustainable buildings as a part of pre-application meetings for projects in the Uptown Public Realm and RIV zoned areas. Currently administered by the Green Building Alliance, the process includes learning more about the project to understand interest, reviewing potential improvements, and establishing a simple resource-use model that shows the expected energy and water use for the project. This information is then used to determine how potential changes to the project could impact the project's resource use and applicants are connects with experts and other resources throughout the region.

#### *Actions*

- Build City capacity for conducting the Green Building Review process through partnerships with GBA and other partners.
- Establish a threshold for when projects should receive a Green Building Review and expand the program to all areas of the City.
- Integrate Green Building Reviews into other programs and requirements expanded or established through the Energy Strategy (i.e., BE-1, BE-2, and BE-3).

**Partners:** GBA

## Infrastructure (I)

How can the City maximize the benefits and performance from infrastructure investments?

### I-1. Integrate energy planning into Citywide Comprehensive Plan

Strategic Energy Planning is the idea of integrating energy planning into other long range objectives such as land use and transportation planning. The City of Pittsburgh plans to integrate energy planning into its ongoing Comprehensive Plan, which allows the city to align future development patterns, density and transportation systems with new, more sustainable energy systems. Opportunities for district energy can be identified where sufficiently dense development patterns are present and infrastructure investments for transportation and other purposes can be combined with the delivery of new energy systems (e.g. Downtown-Oakland Bus Rapid Transit project).

#### Actions

- Identify different focus areas:
  1. Energy opportunity areas where existing and proposed density and use types would support district energy or other renewable energy strategies.
  2. Energy impact zones where a targeted individual solution might be needed to overcome high energy burden (EB<sup>1</sup>) or other inequities.
- Determine opportunities for future Energy Master Plans.
- Map scenarios, analyze and identify energy opportunity areas through the Citywide Comprehensive Plan and neighborhood plans to encourage future energy master planning, long range infrastructure planning with utilities, or other interventions.
- Work with the URA and other organizations to strategically identify property and land for future energy and infrastructure investments such as energy generation and storage sites.
- Identify roles that research and business communities can play in City decarbonization including new market opportunities, partnerships, and entrepreneurship.
- Plan for grid and distribution modernization to serve the joint needs of small building and residential sectors, decarbonized fuel sources, telecommunications and smart grid, electrification of transportation and public transportation networks.

**Partners:** GBA, Utilities, URA, DOMI

### I-2. Long range infrastructure planning with utilities

Through long-range infrastructure planning, City departments, utilities and other parties can share costs, increase efficiency in system design, reduce duplication and service disruptions, and ensure that important details and project needs are aligned. This minimizes community impacts, saves money, and allows for a more equitable distribution of infrastructure investments.

---

<sup>1</sup> Energy Burden is the percentage of household income that goes toward energy costs (electricity, home heating, and transportation). An individual is considered to experience “high energy burden” when a disproportionate amount of their household income goes towards their energy cost.

*Actions*

- Establish relationship with the Climate and Energy Committee where members regularly collaborate with regional utility partners on development projects.
- Collaborate with utilities on long-term priorities and investments to secure future energy infrastructure that supports electrification of transport system and efficient thermal energy sources for the City.
- Coordinate collaboration on long-term priorities with utilities to efficiently use resources, reduce waste and improve project quality.
- Integrate long-range infrastructure plans with the Citywide Comprehensive Plan, neighborhood plans, new public works projects, and the review of major development projects.
- Identify publicly-owned land in areas with dense development activities that can be utilized as sites for energy infrastructure including generation and storage sites. These areas include:
  - Downtown
  - Lower Hill and Uptown
  - Oakland
  - Strip District
  - North Shore
  - East Liberty
  - Specially Planned Districts
  - Institutional Master Plan Areas
  - Places of significant public ownership where the City or other public entities are planning investments (i.e. 62nd Street, VA Public Safety Campus, State Correctional Facility).

**Partners:** DOMI, Utilities

### I-3. Undertake program of energy master planning city- and district-wide

Energy Master Planning plans for the energy needs of an area through discussion with affected stakeholders and analysis of generation/distribution systems to serve future needs. It often creates different growth and service scenarios in order to chart a mutually desirable path forward that meets both City and stakeholder goals. The resulting plan includes shared outcomes, a timeline and framework for establishing energy systems, necessary legal agreements and governance structures for investment, management and maintenance. Establishing a citywide strategy for completing district-scale plans allows the City to better understand the cumulative benefits of these efforts.

*Actions*

- Focus on energy opportunity areas identified in the Citywide Comprehensive Plan, Strategic Energy Plan, or adopted neighborhood plans.
- Use City departments and other partners to lead process with stakeholders.
- Pilot district-scale energy planning through the Oakland Energy Master Plan.
- Identify likely future district-scale energy master planning areas:

- Hazelwood Green
- Esplanade (Chateau)
- Strip District
- East Liberty
- Uptown and Greater Hill District (Phase 2)

**Partners:** GBA, utilities, other affected stakeholders

## Efficient City (EC)

How can the efficiency of City operations be increased?

### EC-1. Integrate energy and sustainability into City operations

Creating an efficient city requires integrating climate and energy goals into city processes and operations as they relate to the utilization of city resources. Incorporating energy and sustainability into city operations acknowledges that city assets are critical components for attaining climate goals.

The city has accelerated the integration of climate actions into city operations through a partnership with the American Cities Climate Challenge (ACCC). As part of the Challenge, the City has established four “Delivery Units,” cross-departmental project teams, focused on the integration of new policies and standards into city operations in accordance with the approved Climate Plan objectives. Their areas of focus are: Renewable Energy Procurement, Streetlight Retrofit Deployment, Electrical Vehicle Procurement and Fleet Transition, and Net Zero Buildings Implementation.

#### Actions

- Publish Internal Energy Strategy.
- Build energy efficiency projects into the Department of Public Works Facilities Plan.
- Execute Renewable Energy Procurement Strategy.
- Accelerate fleet electrification and EV charging deployments with city facilities and parking lots.
- Execute LED Streetlight Replacement Project

**Partners:** DPW, OMB, Mayor’s Office

### EC-2. Create standards for energy infrastructure

The City needs to determine how energy infrastructure standards such as district energy, vehicle charging, and renewables should be designed and reviewed by appropriate boards and commissions. These standards will help mitigate and resolve conflicts at an early stage of the planning process. The Delivery Units (see EC-1) are responsible for advancing these design standards:

- Streetlights Retrofit Deployment is developing a Dark Skies Standard for public lights.

- Net Zero Building Infrastructure Unit (NZBIU) has crafted the Net Zero Buildings Standard for major public retrofits.
- Renewable Energy Procurement team is creating an electricity wholesale market sub-account to enable renewable power purchasing agreements.
- Electric Vehicle Procurement and Fleet Transition has created the Electronic Vehicle Charging Strategic Plan.

#### *Actions*

- Delivery Unites develop standards for energy infrastructure.
- Use Art Commission to adopt standards in order to reduce future hurdles to project delivery.
  - This should include but is not limited to:
    - District energy plants
    - PV installations
    - EV chargers
    - New types of lighting

**Partners:** DOMI

### EC-3. Engage communities on the topics of energy future and energy burden

Use educational programming to engage and educate communities about a just energy transition in Pittsburgh. Community awareness is necessary to create policies and guides that are inclusive and impactful and enhance the lives of residents.

#### *Actions*

- Develop a fun, interactive program to bring solar installations into communities and give people a first-hand experience of an energy future. (e.g. Tustin Smart Park solar-powered chargers)
- Partner with local organizations such as Carnegie libraries and local to museums to create educational programs and materials about how energy investments benefit residents and the City of Pittsburgh.
  - Leveraging a relationship with Carnegie Museum's Climate and Urban Systems Partnership (CUSP) network would allow the City to generate hands-on educational "kits" that could be used as interactive training tools for not only Pittsburgh but other regional and city partners that participate as part of the CUSP network.
- Work with Registered Community Organizations to educate members on the linkages between energy, sustainability, public health, and equity to encourage empowerment and advocacy.
- Establish models and education modules to teach communities about integrating energy into the planning process at the neighborhood scale.

**Partners:** DPW, URA, universities, Carnegie Museums, Carnegie Libraries, RCOs



#### EC-4. Provide data to integrate energy performance into more sectors

Data collection and reporting are an integral part of energy decision-making for the City, institutions, organizations, and businesses. It also builds awareness for inefficiencies and identifies opportunities for intervention and innovative strategy, which may be driven by utility or private market.

The City's Energy Benchmarking and Performance program collects data annually on the energy consumption of commercial properties 50,000 square feet and above across the City. Sharing building energy consumption data with the public and guiding building owners to energy efficiency resources will help Pittsburgh meet its energy and emission reduction targets.

#### Actions

- Publish Energy Benchmarking data to showcase local energy leadership in new and interactive ways.
- Allow data to be downloaded and used by researchers, students, and businesses.
- Consider a program similar to PGH Lab and/or Hackathons that encourage innovative uses of benchmarking data.
- Support the advancement and utilization of existing and new energy programs and initiatives:
  - CPACE (Commercial Property Assessed Clean Energy Financing) adopted by Allegheny County and available to commercial property owners.
  - State Government policy advancements like RGGI (Regional Greenhouse Gas Initiative) which provides state-level carbon credit trading and Pennsylvania Community Solar.
  - Local-level programs:
    - Expand the Commercial Building Energy Benchmarking Data Collection to target properties 25,000 square feet and above;
    - Expand the City's Net Zero Energy Requirement to include allied agencies like the Housing Authority of Pittsburgh, Urban Redevelopment Authority, and Pittsburgh Parking Authority.
    - Establish Home Energy Audit program (see BE-3).

**Partners:** GBA, real estate community, building managers, Allegheny County and PA State Departments

#### Governance (G)

What committees, systems, and partnerships are needed to implement these strategies?

#### G-1. Establish the Climate and Energy Advisory Committee

The Climate and Energy Advisory Committee will be a public advisory committee to help create city projects, guidelines, and standards. Once established, it will provide expert advice, create a public forum for the City's climate and energy-related work/objectives, and help integrate energy and climate considerations into city operations.

*Actions*

- Convene experts from the greater Pittsburgh region to advise City leaders and other partners on best decarbonization and implementation strategies.
- Collaborate with City committees and commissions (e.g., Planning Commission, Art Commission) to integrate energy and decarbonization into City processes.
- Track, update and oversee changes to the Climate Action Plan.
- Conduct research and write reports as identified by the group, the City, and its partners.

**Partners:** Members of the Climate and Energy Advisory Committee

## G-2: Evaluate the creation of Energy Improvement Districts

Neighborhood Improvement Districts (NIDs) are quasi-governmental organizations enabled by state legislation. They allow local governments to create local specialty purpose revenue generation zones and modernizing energy infrastructure is one of the shared benefits allowed under state law. NIDs allow local governments to raise capital and support the modernization and installation of energy related infrastructure assets. A program like this could help the City overcome funding and organizational hurdles that slow the creation and expansion of energy systems in Pittsburgh.

*Actions*

- Establish an evaluation and policy document to facilitate the NID process.
- Assess how NIDs can be utilized to repay investments in energy infrastructure.
- Identify who would serve as the management association for energy NIDs.
- Pilot the first Energy Improvement District.

**Partners:** URA, Parking Authority

## G-3. Evaluate the creation an energy authority or equivalent

An energy authority is a specialty-purpose government agency created for the advancement of energy related policy, investments, and energy-related infrastructure. Currently, the City's responsibilities are dispersed throughout a number of public entities. By creating an energy-focused authority, the City could better coordinate efforts and consolidate resources to advance energy transition.

*Actions*

- Work with existing authorities to assess their current responsibilities and identify opportunities to strategically expand their responsibilities for addressing energy.
- Review case studies and best practices from organizations throughout North America (i.e. Philadelphia Energy Authority) and identify common energy authority elements, how they are created and common issues they face.
- Evaluate the use of the City's bonding capacity to pay for high up-front capital investments that are repaid over time, potentially by Energy Improvement Districts.
- Provide recommendations for enabling legislation at the state level.

- Convene City authorities to conduct an evaluation of existing capabilities to identify service and policy gaps.

**Partners:** URA, Parking Authority, Mayor's Office, State representatives

## Implementation

The methodology for developing this strategy included the organizing of internal and external working groups, evaluating comparable cities and investigating current city processes. In order to implement this strategy, the City will continue to leverage city team members internally and external partnerships with local organizations. The Department of City Planning will establish also establish an Energy Delivery Unit to guide and advance the Energy Strategy and the recommendations identified within this document. Concurrently, the Department will establish an external Climate and Energy Committee (see G-1).

### Why Create an Energy Delivery Unit?

The creation of delivery units (DUs) allows project teams to engage diverse expertise, integrate additional capacity, and advance specific policy or program objectives. The Energy DU will bring together existing staff from each of the Department of City Planning divisions to align goals, projects, and partner programs as they pertain to climate and energy.

### What is the Purpose of the Energy Delivery Unit?

The Energy DU will help execute City's energy commitments and develop the policies, practices and tools needed to advance the goal of reducing GHG emissions by 50 percent within the City of Pittsburgh established by the City's Climate Action Plan.

The Energy DU will also work to integrate climate and energy considerations into existing departmental processes, commissions and advisory programs.

### What is the Climate and Energy Committee?

The Climate and Energy Committee is a systemic tool to help leverage the external expertise and knowledge of many cross-sectoral partners. The committee will serve as advisor to the advancement of City policies, programs, and projects. They will also be responsible for sharing information between partners and the general public.

### Why is the Climate and Energy Committee Valuable?

Data and information often work at cross purposes. The Committee will help coordinate information and advance departmental efforts to integrate climate and energy policies in the evaluation of projects and decisions in the built environment.

### What are the 2021 Targeted Activities for the Delivery Unit?

#### 1. Establish priority projects for each division

- The Director will work with all division heads to identify a 2021 priority, the staff that will project manage that initiative and any budgetary resources needed.

- 2022 priority projects should also be identified so divisions may plan for any preparatory work before the end of the year.
  - The established priorities will influence the staffing and work of the Energy Delivery Unit.
- 2. Establish the Energy Delivery Unit**
- Unit members will represent each division of the Department of City Planning.
  - Specific roles include Energy Advisor, Energy Planner, Neighborhood Planner for Downtown and Oakland and other representatives selected by the Director.
- 3. Develop DU activity schedule**
- The Energy DU will create a 'workflow' identifying annual priorities.
  - A timeline will be created to prioritize activities and ensure the fulfillment of the 2030 goal.
- 4. Develop a policy priority agenda and activity schedule for Climate and Energy Committee**
- Potential activities: discussion on Performance Points Program expansion, energy evaluation integration into development review, and improved utility and City coordination
  - Align existing energy planning activities with DU (Oakland Master Plan, EcoInnovation District Implementation, Hill District and Lower Hill District, Comprehensive Plan)
- 5. Engage City authorities and analyze current energy activities**
- The City of Pittsburgh has made a lot of progress with allied authorities to improve operational energy management such as joint procurement of electricity, deployment of electric vehicle charging networks integration of energy efficiency.
  - Future opportunities should expand efforts related to joint infrastructure planning, financing, and governance and management models.
  - Develop assessment and policy brief on Neighborhood Improvement Districts.
  - Develop policy brief on City & Authority Capacity & Gap Analysis
- 6. Create Climate and Energy Committee (Organize and convene external partners)**
- Recruit members for the Climate and Energy Committee that represent external partner organizations such as the Green Building Alliance, Urban Land Institute, American Institute of Architects – Pittsburgh, Registered Community Organizations, local university representatives, local utilities and more.
- 7. Organize and Host Education Series on Energy and Climate for City Planning Staff**
- 2021 Topics will include:
    - Passive Haus Design – Presented by North American Passive Haus Association (NAPHA)
    - Energy Grid 101 – Presented by Duquesne Light Company (DLC)
    - Building Performance and Affordability Housing – Presented by Pennsylvania Housing Finance Agency (PHFA)

## Appendix

### Other Plans Referenced in the Energy Strategy

[EcolInnovation District & Performance Points](#)

[Energy Burden in Pittsburgh](#)

[Pittsburgh Building Benchmarking](#)

[Pittsburgh Climate Action Plan 3.0](#)

[Pittsburgh P4 Performance Measures](#)

[Pittsburgh Resilience Strategy](#)

[Pittsburgh Technology Report](#), Siemens Report and Energy Performance Tool

[Marshall Plan for Middle America](#)

[UN Sustainable Development Goals \(SDG's\)](#)

### Acronyms

**CAP:** Climate Action Plan

**CPACE:** Commercial Property Assessed Clean Energy financing

**CYEP:** City Energy Performance

**DCP:** Department of City Planning

**DU:** Delivery Unit

**DOMI:** Department of Mobility and Infrastructure

**DPW:** Department of Public Works

**GBA:** Green Building Alliance

**HACP:** Housing Authority of the City of Pittsburgh

**NIDs:** Neighbourhood Investment District

**OMB:** Operations, Management, and Budget

**PLI:** Permits, Licenses, and Inspection

**URA:** Urban Redevelopment Authority