



Atlanta

mini Technical Assistance Panel

Peer Presentations

TEAM # 2

ENERGY REDUCTION & SUSTAINABILITY RESOURCES FOR INDUSTRIAL BUILDINGS

MAY 9, 2023

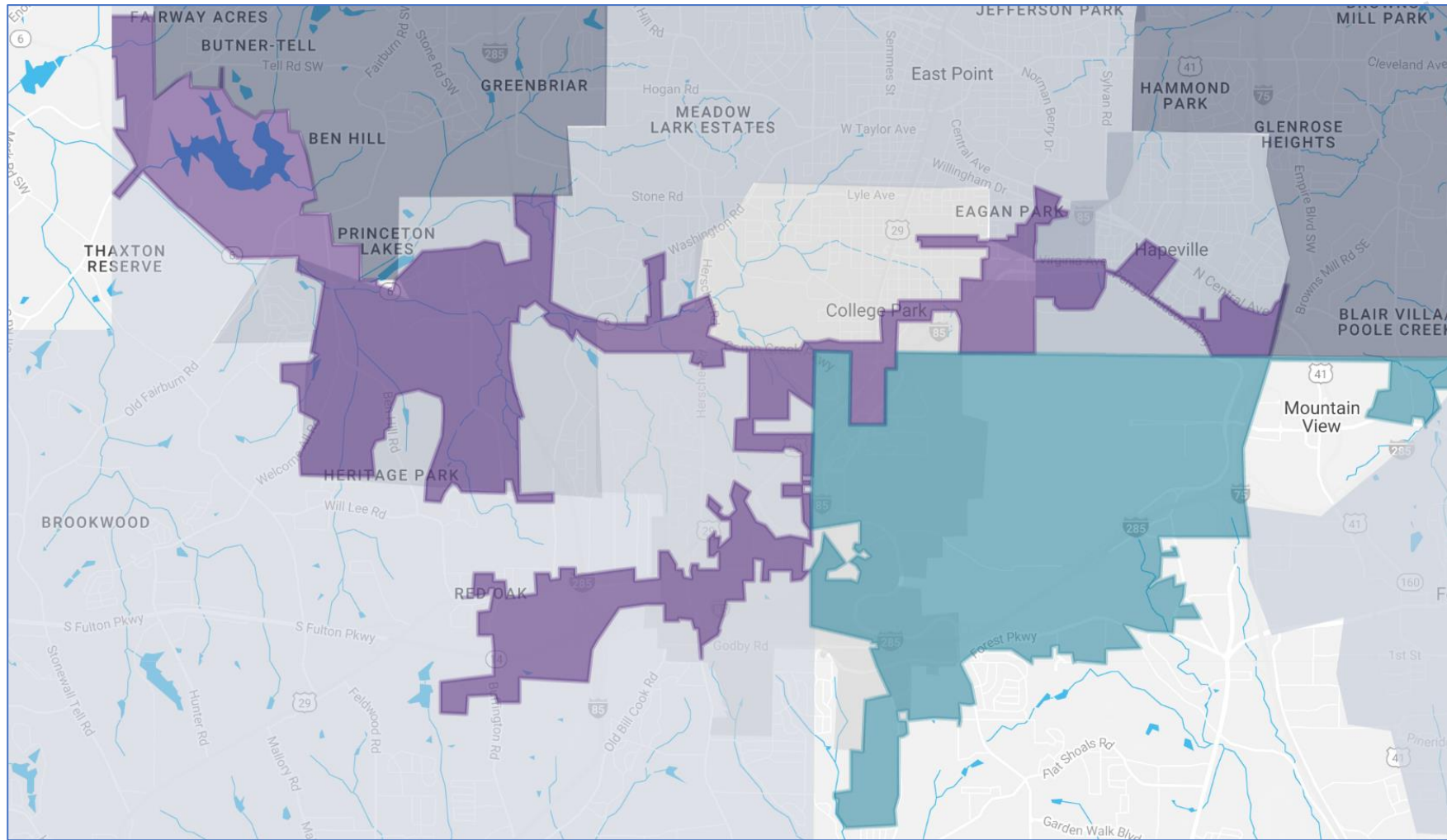
Presentation Outline

1. AIRPORT CID OVERVIEW
2. CHALLENGES / OPPORTUNITIES
3. CASE STUDIES
 - a) PORSCHE
 - b) PROLOGIS
4. RESOURCES
 - a) SOUTHFACE
 - b) GEORGIA POWER
 - c) CEMEX
5. SUMMARY OF FINDINGS

Objective

Provide educational resources related to decarbonization and sustainability for industrial property owners.

Airport CID Boundary (Airport West and Airport South)



Challenges / Opportunities

1. EDUCATION

- NO ORGANIZED ADVOCACY
- NO ENFORCEMENT (Codes, standards, etc.)
- INCENTIVES ARE FEW AND NOT EASILY ACCESSIBLE
- RESOURCES AND MEANS/METHODS UNKNOWN

2. COST

- TIGHT MARGINS IN PROFORMA

3. MOTIVATION

- DISCONNECT BETWEEN OWNER AND END USER
- GA POWER / CITY UTILITIES POTENTIAL LOSS IN REVENUE
- PR GOALS VS MEANINGFUL IMPACT

Case Studies



Porsche HQ Atlanta



Prologis

Porsche

2030 NET CARBON NEUTRAL PLAN

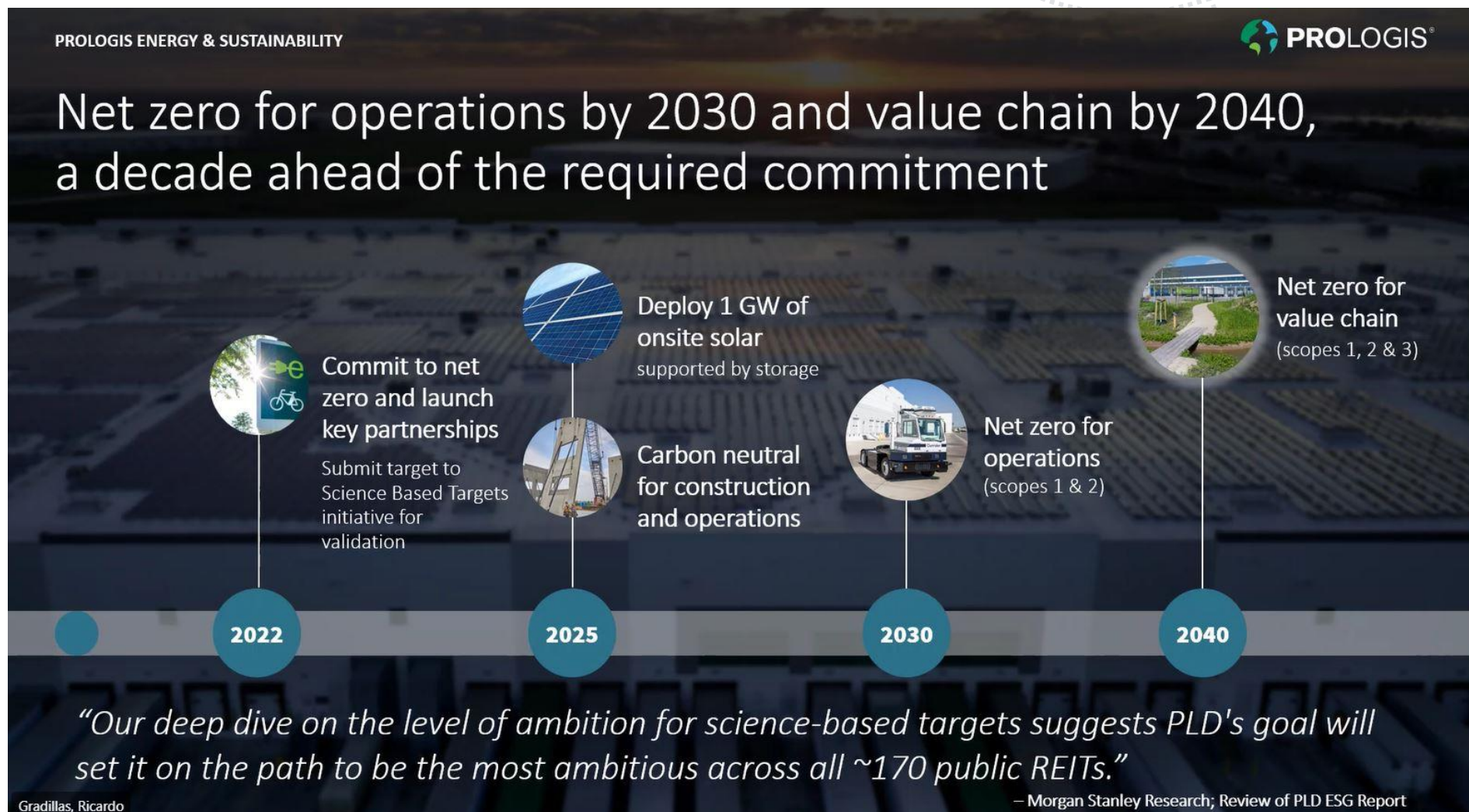
- 80% of their cars will be electric by 2030
 - Taycan Cross Turismo will be the first vehicle that will be CO₂-neutral throughout its use phase
- Porsche will invest more than a billion euros globally in wind turbines, solar energy and other climate protection measures.
- At the Atlanta Headquarters Porsche piloted these sustainability initiatives with their build out in the following ways:
 - LEED Gold (to match existing campus)
 - Solar energy throughout the campus via covered walkways and parking areas. The renewable sources alone cover about 1/3 of their energy needs
 - Water reuse on the track. Recycled storm water has eliminated need for city water use for the past 8 years
 - Scale up native landscaping through biodiversity and non irrigated plantings
 - Employee wellness initiatives with walking trails on campus
 - Pilot projects for EV trucking to distribute the cars and parts are in the works
- **Cons:** Porsche uses solar to compensate for lack of building energy efficiency standards. This is not achievable for smaller property owners with a smaller budget
- Link to Porsche sustainability report:
 - Sustainability is an important part of their Strategy for 2030 – holistically: on economic, ecological and social terms. For a full



Prologis

2040 NET ZERO

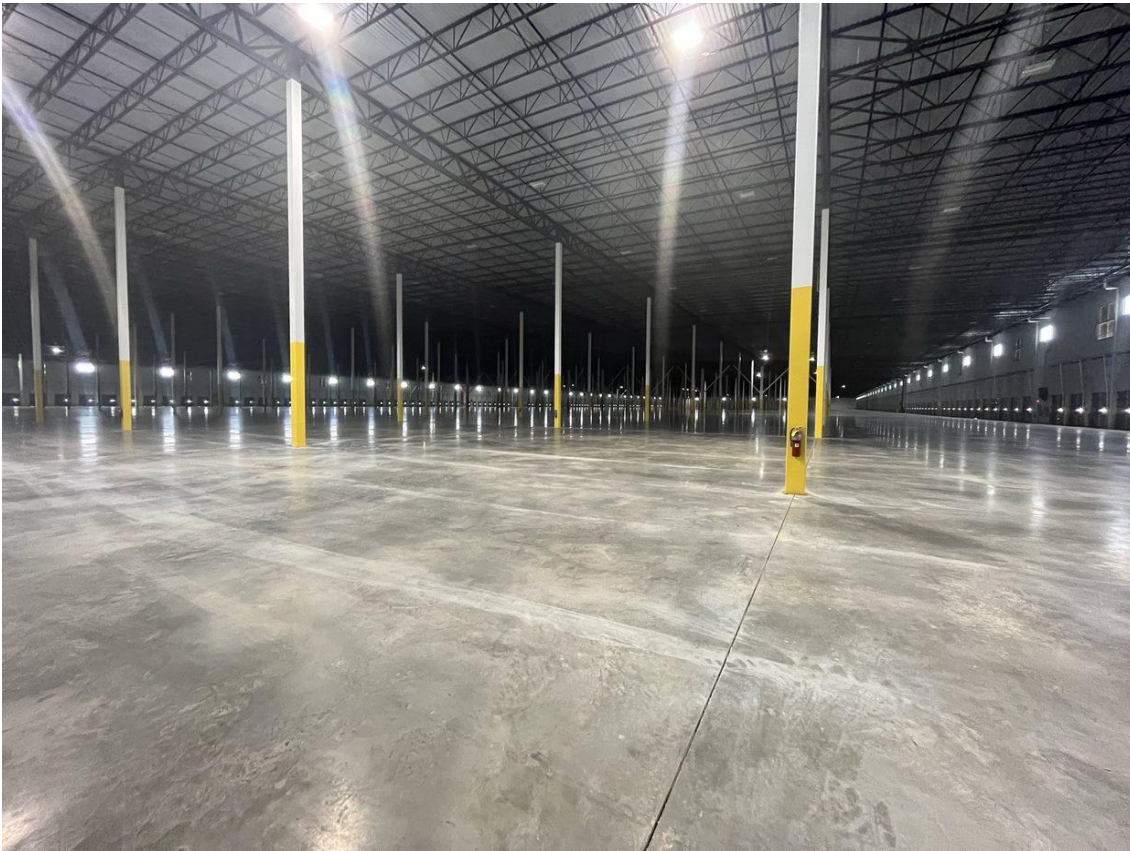
- [Link to Prologis sustainability report:](#)
 - [Press Release](#)
 - [Read the Prologis 2021-22 Prologis ESG Full Report](#)



Prologis Tour

1.1m sqft of industrial building

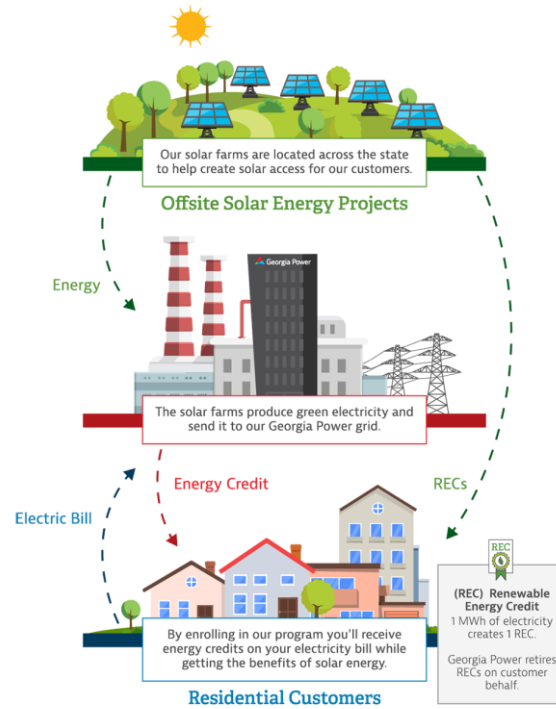
- Net zero ready – look at all that rooftop primed for solar!



Resources



Southface Institute



Georgia Power



Cemex

Southface

Services to assist owners to reduce energy use

- **Level II Energy Audit (\$2,500 +)**
 - Detailed energy assessment of a building or facility that aims to identify energy conservation opportunities and potential cost savings
- **Retro-Commissioning (RCx)**
 - Evaluating and optimizing the performance of an existing building's systems and equipment to improve energy efficiency, reduce operating costs, and enhance occupant comfort. Involves a thorough investigation of a building's MEP systems.
 - Corrective actions may include repair/upgrade of equipment, controls upgrades and adjustments, or new energy-saving measures.
- **BIT program (\$1,500)**
 - Identifies top 16 things to do to optimize/reduce energy usage.
- **Third party certification consulting (e.g., LEED)**
- **Financial Assistance Consulting**
 - State and Federal incentives for GHG reduction and energy efficiency:
 - Georgia power programs/incentives
 - Grants

Georgia Power

Commercial Energy Efficiency Resources

- Offers rebates to help offset the cost of high-efficiency equipment installation for existing building, new construction and major renovation projects
- Eligible types of high-efficiency equipment: existing building lighting, new construction lighting, heating & cooling, food service & grocery, pumps, water heaters, business equipment, custom equipment & building tune-up
- Projects can earn up to the cap per building per year under each project type listed
- For example, a project that includes a custom upgrade and existing building lighting could earn up to \$125,000 per building per year of the program
- Georgia Power recommends reaching out to them to review the high-efficiency equipment prior to purchase to ensure it qualifies for a rebate

Project Type	Cap per Building per Year
Any combination of prescribed rebates including: Business Equipment Existing Building Lighting Food Service and Grocery Equipment Heating and Cooling Equipment Pumps Water Heaters	\$50,000 *capped at 50% of equipment cost
New Construction Lighting	\$25,000 *capped at 50% of project cost
Outdoor Pole-mounted Lighting	\$10,000 *capped at 50% of equipment cost
Custom Upgrades	\$75,000 *capped at 50% of project cost
Custom Chiller Plant Projects	\$250,000 Per chiller plant per year *capped at 50% of project cost

Cemex

REDUCING CARBON FOOTPRINT THROUGH LIGHTWEIGHT CONCRETE

- Concrete is the second most consumed material on the planet after water.
- Cement production represents approximately 6 - 8% of the world's carbon emissions.
- Cemex offers cement products (Vertua®) designed to incrementally decrease levels of CO₂ compared to the industry standard Portland-Cement-based concrete. Cemex aspires to deliver net-zero CO₂ concrete by 2050.
- Cemex products are suitable for a range of construction, including:
 - Industrial construction (tilt-up and warehouses)
 - Commercial, office, and mix-use development
 - Infrastructure (roads, bridges)
 - Residential applications (single family and multi-family)



- **Net Zero Construction Tip:**
 - Look for Environmental Product Declarations ("EPD") on products and materials: An EPD is an independently verified & registered document that communicates transparent & comparable information about the life-cycle environmental impact of a product.

Summary of Findings & Conclusions

Industrial Property Owner Needs:

- Education
 - Southface is an existing educational tool
 - Larger companies (Prologis, Porsche) have decarbonization strategies developed. Their strategies can inform smaller company strategies.
- Advocacy
 - Incentivization design exists in other jurisdictions – need to replicate in Atlanta.
- Policy
 - High performance building and sustainability standards exist – need city enforcement
- Leadership
 - Opportunity for CID to serve as a resource for industrial owners and operators