

# Environment and Sustainability in Capital Projects



# P69 Solar Panels

- Designed to generate approximately 127,000 kWh annually
- Offset greenhouse gas emissions by 1.8MtCO<sub>2</sub> annually (4,400 miles)
- Projected to save \$10,000 in energy costs per year
- Grant funds from Dept of Commerce
- Photovoltaic panels constructed in Washington
- Designed and installed by Puget Sound Solar



Supports local economy and Green Tech economy in Washington

# North Satellite

- Water conservation
  - Rainwater harvesting
  - Low-flow fixtures
- Energy Conservation
  - 17% better than code
  - LED fixtures, daylighting
  - Insulation and glass
  - Efficient motors



Pursuing LEED Silver

# NORTH SATELLITE

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## Water Conservation

- (2) 15,000 gallon tanks and piping being installed for rainwater harvesting use in restrooms
- Use of ultra-low flow fixtures in restrooms



## Waste Reduction

- 95% construction waste diverted from landfills: Copper wire, wood, steel, pipe, aluminum, plastic, concrete, rebar, and other construction debris



## Energy Conservation

- Energy savings, 17% below code
  - Entire building LED lighting
  - Daylighting optimization and lighting controllability
  - Insulation and glass
  - Baggage, escalator, elevator motor efficiency



## LEED Status

- Design credits complete. Tracking construction credits (50% complete)

# International Arrivals Facility

- Natural lighting and glare control
- Energy efficient lighting and roofing material
- Enhanced commissioning
  - Air pressure testing
  - Field water testing
- Construction waste recycling



Pursuing LEED Silver V4

# INTERNATIONAL ARRIVAL FACILITY

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## Water Conservation

- Installation of “purple pipe” for future use of recycled water
- Use of ultra-low flow fixtures in restrooms



## Waste Reduction

- 95% construction waste diverted from landfills: Copper wire, wood, steel, pipe, aluminum, plastic, concrete, rebar, and other construction debris



## Energy Conservation

- Energy savings, 12% below code
  - Entire building LED lighting
  - Daylighting optimization and lighting controllability
  - Advanced metering
  - Baggage, escalator, elevator motor efficiency



## LEED Status

- Design credits complete. Tracking construction credits (50% complete)

# CONCOURSE D ANNEX

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## Water Conservation

- Use of ultra-low flow fixtures in restrooms



## Waste Reduction

- 98% construction waste diverted from landfills: Copper wire, wood, steel, pipe, aluminum, plastic, concrete, rebar, and other construction debris



## Energy Conservation

- Energy savings, 20% below code
  - Entire building LED lighting
  - Daylighting optimization and lighting controllability
  - Insulation and glass
  - Radiant floor heating/cooling



## LEED Status

- LEED process complete. Awaiting response from USGBC.

# SEA-TAC AIRPORT LEED “MASTER SITE”

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## Water

- Outdoor Water Use Reduction
- Rainwater Management
- Metering



## Innovation & Design

- Salmon Safe Certification
- Pollinator Conservation Program
- Vehicle Fuel Reduction Program
- Food Donation Program
- Green Janitorial Contract



## Energy

- Refrigerant Management
- Metering



## Materials

- Storage and Collection of Recyclables

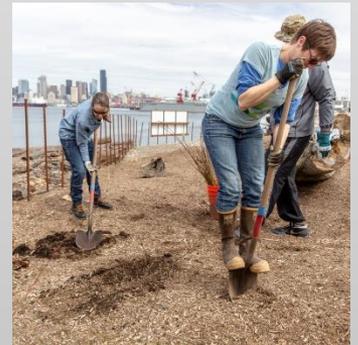


## Land Use

- Sensitive Land Protection
- Density and Diverse Use
- High Priority Site
- Access to Quality Transit

# Greenhouse Gas Reductions

- Carbon reductions
  - Renewable Natural Gas
  - Energy Conservation
  - Solar
  - PCA/EGSE
  - Sustainable Aviation Fuels
- Carbon Capture/Sequestration
  - Smith Cove Blue Carbon Project
  - Trees planting
  - Land Stewardship Planning
  - Habitat Banking



Multiple programs to reduce or remove Carbon