SEPTA’s Budget Neutral Approach to Sustainability

Erik Johanson, Chief Innovation Officer

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SEPTA’s Value Proposition

Transit Is Inherently Sustainable

LOWER PER PASSENGER MILE GHG EMISSIONS

- Subway/Elevated: 0.33
- Trolley: 0.38
- Regional Rail: 0.40
- Bus Fleet: 0.60
- Car: 0.87
SEPTA’s Sustainability Program

Award-Winning SEP-TAINABLE

COMMONWEALTH AWARD

10thousand Friends of Pennsylvania
LEADING THE WAY ON SMART GROWTH

Governor’s Award for Environmental Excellence

Energy Storage North America
2014 Awards
SEPTA’s Sustainability Program

Triple Bottom Line Approach

Off-Budget Financing (Power Purchase Agreements, Energy Performance Contracts, Public-Private Partnerships)

Grant Funding (FTA LoNo, CMAQ/DERA, PEDA)

Core Business (Embedding Sustainability into Capital + Operations)

“BUDGET NEUTRAL” APPROACH (I.E., NO SET BUDGET FOR SUSTAINABILITY)
Energy Action Plan

Comprehensive Budget-Neutral Plan to Reduce Energy & GHG

WAYSIDE STORAGE (GRANTS, P3)

The New York Times
In Philadelphia, Batteries on Transit System Power More Than Just the Trains
January 22, 2016

BATTERY-ELECTRIC BUSES (FTA LONO GRANTS)
ON-SITE, ROOFTOP SOLAR (PPA)

OFF-SITE, UTILITY SCALE SOLAR (VIRTUAL PPA)
Power Resiliency

Grants & Embedded in Core Operations

SOLAR + BATTERY-POWERED SIGNAL SYSTEM (FTA GRANT)

➢ Partially Funded Through Federal Climate Resilience Initiative

➢ 48 Hours of Back-Up Power In the Event of Signal Power Failure

➢ Avoids Rippling 12-Minute Average Delay from Each Outage

➢ Zero Signal Power Failures Since Pilot Installation in 2018

➢ Now Under Construction: Three More Lines (Ultimate Goal: Full Regional Rail Buildout)

➢ Potential to Become Primary Power in the Future