



Enabling Ontario's DSO Future: PowerShare's Approach for Shared DSO Capabilities

OEB DSO Capabilities Symposium

June 24, 2025

Introducing the PowerShare Group!

- In June 2025, nine small and mid-sized, forward-looking Ontario LDCs launched PowerShare Group—a new shared-services collaboration designed to accelerate the delivery of DSO functions, including local energy markets, forecasting, and DER coordination



PowerShare Group: Supporting Ontario's Energy Transition

- This collaboration empowers small and mid-sized LDCs in Ontario to lead through shared innovation, coordinated policy development and joint system planning
 - Member LDCs are small enough to be nimble and, collectively, large enough to be effective
- By combining the Group's expertise and aligning strategic objectives, it is better positioned to deliver meaningful results for both the electricity sector and the communities they serve
- Building on early achievements from DER enablement projects across Ontario, PowerShare applies proven, real-world approaches to strengthen the Group's existing DSO expertise
- The Group is now focused on validating the operational and technical requirements needed to transition from pilot initiatives to standard practice
 - This will enable LDCs to take on enhanced roles in DER coordination as part of day-to-day operations
 - The Group is also working to develop common approaches and tools that offer a scalable model that can be replicated across Ontario

PowerShare Group: A Blueprint for DSO Capability Today

- The Group is committed to playing an active and informed role in the regulatory and technical discussions shaping the future of electricity distribution in Ontario
- Current Focus:
 - **System Capability Assessments:** Coordinated planning, visibility, and forecasting across multiple LDCs
 - **Program Development:** Scalable DER procurements and non-wires solutions
 - **Regulatory Engagement:** Actively participating in the OEB DSO Capabilities Consultation and shaping regulatory tools that support real-world implementation
 - **Shared Services Model:** Providing DSO functionality today—not in-theory or pilots, but through operational coordination that delivers local reliability and system value
- The Group builds on field-tested DER enablement projects; the focus is turning pilots into scalable, repeatable business-as-usual tools
- Overall, the goal is a provincially replicable model for shared-services that supports LDCs of all sizes—and the communities they serve

Presentation Overview

Introduction

- Framing the Opportunity
- Ontario Context
- Unlocking the Full DER Value Stack

PowerShare Group's Call for Action

1. Define “DSO-as-a-Service”
2. Standardize System Assessments with Sector-Wide Input
3. Enable Fair Cost-Sharing and Flexible Compensation
4. Establish a Provincial DER Strategy

Where We Go From Here

- PowerShare is Ready to Take the Next Steps
- PowerShare is Demonstrating Market Leadership

Introduction: Framing the Opportunity

- PowerShare Group brings together LDCs to collaboratively deliver DSO capabilities with a commitment to enabling DERs cost-effectively
 - A shared-services model that supports innovation while managing affordability
 - Pools technical, operational, and planning capacity to scale DSO functions across smaller and mid-sized LDCs
 - Rooted in real-world implementation—not theoretical models—with proven track records in DER integration
- This engagement opens the door for a deep discussion on the evolution of Ontario's electricity sector
 - Ontario's electricity distributors have been evolving DSO capabilities for years (e.g., AMI, grid modernization, connecting DERs, etc.)
 - The OEB staff paper rightly signals that DSO capabilities are essential to maximizing DER value
 - This is a chance to align policy, regulation, and operations with the realities of DER deployment and electrification

Introduction: Ontario Context

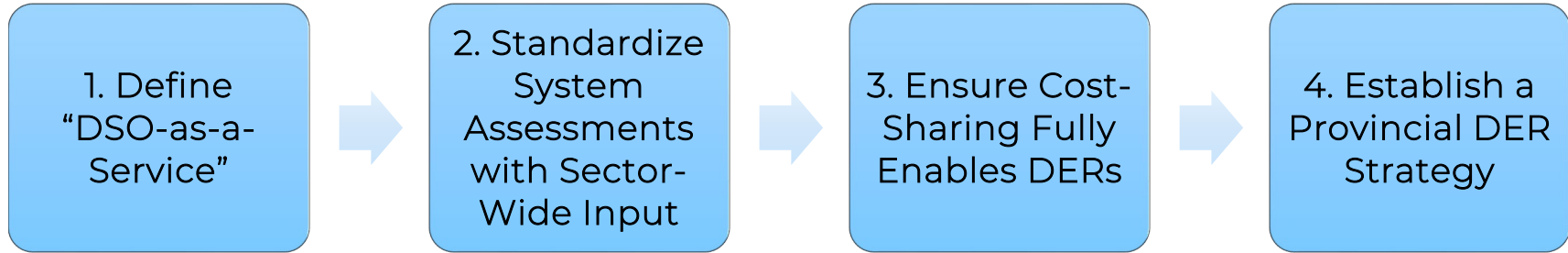
- **We're Not Starting from Zero:** LDCs have already started to adopt DSO functions and Ontario already has a significant base of DERs in their service territory
 - LDCs have years of experience successfully modernizing their grids for focused visibility, integrating and managing DERs, and addressing connections, metering, settlements, and customer programs
- **Ontario-Specific Drivers:**
 - Demand growth and electrification (IESO APO; IEP)
 - Non-wires solutions are now becoming standard planning tools
 - IESO market and out-of-market activity
 - LDCs have proven value in delivering public programs (e.g., eDSM)
 - Pricing and cost drivers (MRP, Global Adjustment)
- **Policy Gaps Create Friction:** Lack of alignment across agencies, funding tools, and frameworks risks undermining cost-effective DER integration

Introduction: Unlocking the Full DER Value Stack

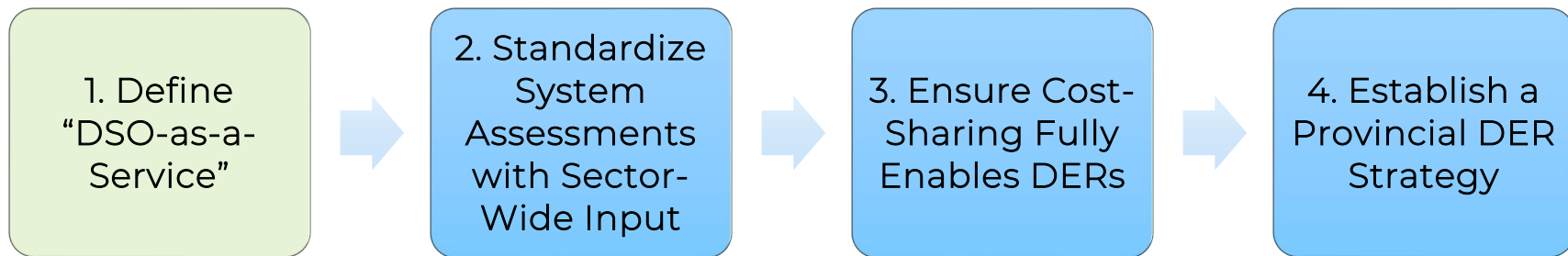
- DERs provide **customer-level value**, **distribution-level value**, and **bulk system value**
- A narrow interpretation of “distribution benefits” risks duplicating efforts, missing opportunities, and sending **conflicting signals** to DER operators

Value Category	Resource Adequacy	Transmission	Distribution	Customer
Energy	Real-time delivery of energy to meet demand needs	Transmission line losses	Distribution line losses	Avoided energy costs
Capacity	Availability to provide energy to meet peak demand	Avoided new transmission facilities	Avoided new distribution facilities	Avoided demand charges
Operational	Ancillary services (e.g., OR, regulation, etc.)	Volt-var control	Volt-var control	Resilience/back-up
Environmental	Certain technologies reduce GHGs (i.e., reduced fuel)	Reduced land-use impacts	Reduced land-use impacts	Certain technologies reduce GHGs (i.e., reduced fuel)

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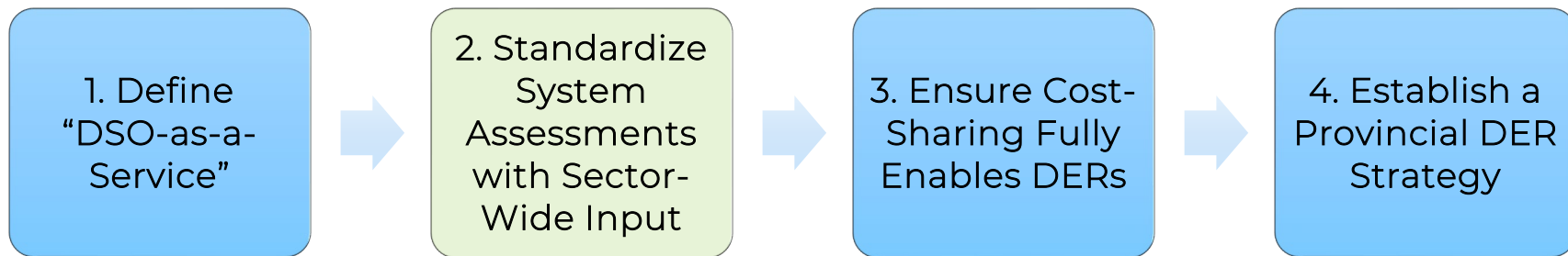


PowerShare Group's Call for Action



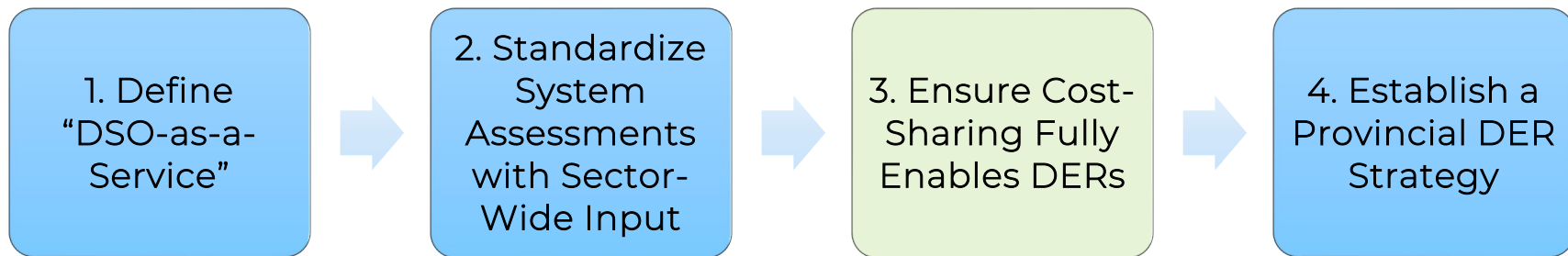
- **Shared Services are Aligned with Ministerial Priorities:** PowerShare Group's approach supports cost-efficiency, cooperation among smaller LDCs, and replicability
- It reflects the kind of **sector collaboration** that Ministry letters of direction have repeatedly emphasized
- Avoid framing DSO services as "large LDCs helping small LDCs" - PowerShare's model is a **peer-based shared-service model**
- Many DSO functions (i.e., DER visibility, system planning, etc.) **are already required today**—they should be supported under current frameworks, not deferred to the future
- Encourage cost-effective DER solutions to be pursued in the near-term

PowerShare Group's Call for Action



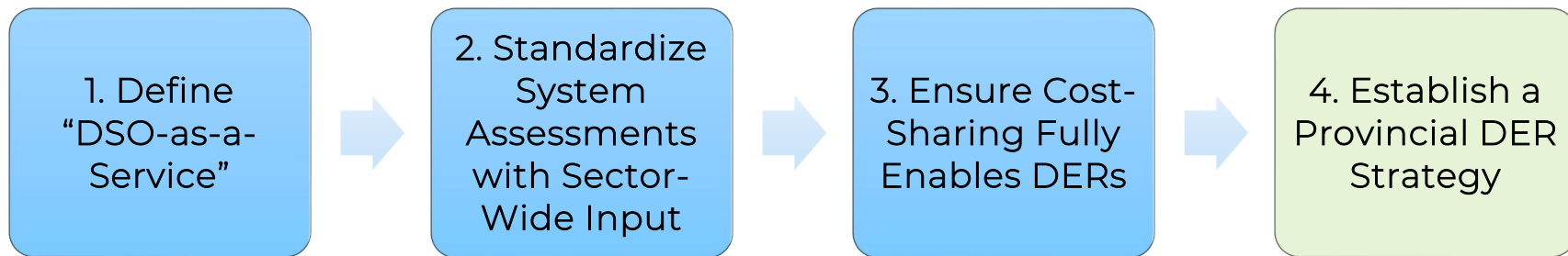
- LDCs already perform many DSO functions through planning, interconnection studies, NWA assessments, and real-time grid operations; much to be learned from varying practices across the province
- PowerShare Group's experience enables a practical and repeatable approach
 - Already developing common approaches to DER visibility, hosting capacity, locational value analysis, and DER forecasting across multiple LDCs
 - **Built to scale across diverse utility sizes and configurations**—from urban to rural, from high-growth to legacy networks
 - Reflects **on-the-ground constraints**: data availability, system limitations, resource variability, and coordination with IESO and other province-wide programs

PowerShare Group's Call for Action



- **DERs deliver value across the system** - Ontario's market structure focuses primarily on the bulk system DER value and does not allow DERs to capture full value stack
- Compensation for value stack should be sourced from bulk-system and local-system
- Avoid program designs that require exclusive participation arrangements
- Avoid over-reliance on wholesale markets alone for bulk system benefit, and recognize Ontario's market structure which includes a mix of contracts, rate regulated assets and wholesale market participation
- Other elements of utility ratemaking also need review and modification (e.g., treatment of capital vs. operating expenses, DER costs vs. LDC operating expenses, etc.)

PowerShare Group's Call for Action



IEP Directive: *"By December 31, 2025, explore and, where appropriate, move expeditiously to provide enhanced guidance to electricity distributors on incentive mechanisms for the use of DER as NWS."*

- Lack of a unified framework leads to **duplication, misalignment, and stranded value**
- Ontario needs a **clear, integrated DER strategy** that:
 - Clarifies IESO and LDC roles and relationship
 - Specifies the explicit goal of achieving both bulk and local value
 - Aligns funding mechanisms for DERs (distribution rate base, wholesale market, Global Adjustment, etc.)
 - Prioritizes interoperability and flexible technical standards

Where We Go from Here: PowerShare is Ready to Take the Next Steps

- Start with Functionality, Not Structure
 - Many LDCs are already delivering “DSO-lite” capabilities
 - Don’t over-engineer—**enable what works and build from there**
 - PowerShare Group’s approach **reduces risk to ratepayers** through collaborative, incremental implementation
- Walk–Jog–Run? Let’s Get Moving
 - Start scaling what’s working today and continue to work with the OEB and IESO to move toward the desired future state

IEP’s grid modernization definition and outcomes: *“The paced, prudent, and cost-effective use of technologies and solutions that improve the efficiency, resilience, reliability, and capacity of electricity distribution systems. The purposes of said investments are twofold: to lower long-term costs for ratepayers and to better manage the availability of electricity to meet growing demand.”*

IEP Directive: *“Define a roadmap by December 31, 2025 for the potential development and implementation of Distribution System Operator (DSO) capabilities, commensurate with need, value, and the flexibility to adapt to evolving circumstances.”*

Where We Go from Here: PowerShare is Demonstrating Market Leadership

- Ready to meet with the OEB to discuss:
 - How section 71 restrictions should be addressed
 - Share results of needs and capability assessment of all nine member LDCs (to be completed within the next 18-weeks)
- We want to keep the momentum going and help inform the OEB's response to new IEP Directives
 - Evidence-base data to be available within the timelines required to report back
 - PowerShare's DSO-as-a-service model is the right way to go forward, and we urge the OEB to address this approach early in the process



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