

NYSERDA Integrated Energy Data Resource (IEDR) General Stakeholders Meeting







11/15/2021




Agenda



TODAY'S AGENDA

TIME	MODULE	OBJECTIVES
5 min	Introduction and Ground Rules	Introduce session facilitators, align on the purpose and objectives of the session, and importance of collaboration in IEDR development
10 min	IEDR Program Background	Provide a brief project background and context for the session
 5 min	<i>Poll/Survey 1: Align on IEDR vision</i>	Collect feedback on stakeholder objectives from IEDR
25 min	Session 1: Understanding Use Cases	Define use cases and differentiate them from technical requirements
 5 min	<i>Poll/Survey 2: Confirm use case understanding</i>	Collect feedback on use case categorization
 5 min	<i>Poll/Survey 3: Exploring use cases</i>	Collect feedback on use case template and examples, and future engagement
15 min	Session 2: Prioritizing Use Cases	Share the criteria that will be used to prioritize use cases
 5 min	<i>Poll/Survey 4: Feedback on prioritization framework</i>	Collect feedback on future engagement for use case prioritization
5 min	B R E A K	
15 min	Session 3: Reviewing Collected Use Cases	Provide an overview of the categories and sources of the use cases collected to the date, and the gaps in use cases identified
 5 min	<i>Poll/Survey 5: Additional use case sources</i>	Receive feedback on the use cases collected from stakeholders
 15 min	Open Forum	Allow stakeholders to asks questions, provide feedback, and propose agenda items for subsequent sessions
5 min	Closeout and Next Steps	Summarize key messages and understanding of path forward

 Solicit participant feedback




Meeting Procedures

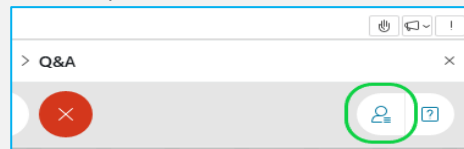
Participation for Members of the Public:

- > Members of the public are muted upon entry.
- > Questions and comments may be submitted in writing through the Q&A feature at any time during the event.

> Chat is disabled



You'll see  when your microphone is muted



- > Today's materials along with a recording of the webinar will be posted to the IEDR Program Documents and Resources page here: <https://www.nyserda.ny.gov/All-Programs/Programs/Integrated-Energy-Data-Resource/IEDR-Resources>
- > If technical problems arise, please contact Sal.Graven@nyserda.ny.gov



Rules of the Road

Be Present

Unplug, Turn off, Tune in - limit distractions by saving emails and phone calls

Be Engaged

Actively participate in the discussion and make sure your perspective is shared via the Q&A function

Be Candid and Transparent

Speak openly, respectfully, and honestly - identify pain points and express frustrations where they exist

Be Interactive

Using the technology for each activity, engage with the content hands on





IEDR Program Background

IEDR Vision Statement

*New York is transforming its energy system into one that is cleaner, more resilient, and more affordable. Effective access to useful energy data will play a critical role in this transformation to inform **investment decisions**, identify **operational inefficiencies**, monitor the effectiveness of **policy objectives**, promote **innovation**, and **encourage new business models**.*



IEDR Program Background

In support of New York State's goal of being a global climate leader, the Integrated Energy Data Resource (IEDR) Program is being launched to guide the development of the IEDR platform. In the coming years, the platform will mature to provide a single statewide platform to securely collect, integrate, analyze, and make accessible a large and diverse set of energy-related data and information from New York's electric, gas, and steam utilities - and other sources.



Stakeholder Trust

- The success and value of the IEDR directly depend on stakeholders' trust in the IEDR as a repository and source of reliable and accurate information.
- The IEDR must be designed, implemented, and operated in a manner that ensures the timeliness, integrity, and accuracy of data stored within and presented by the IEDR



Useful Energy Data

- Access to useful energy data provided by the IEDR will enable analyses that inform investment decisions, identify operational inefficiencies, monitor the effectiveness of policy objectives, promote innovation and encourage new business models.



Consumer Benefit

- Consumer benefits associated with data access can be created by:
 - Taking advantage of economies of scale
 - Minimizing the duplication of implementation and operating costs
 - Reducing the total statewide costs to implement and maintain satisfactory levels of accessibility, data quality, and uniformity
 - Minimizing the total statewide costs to plan, implement, and support new capabilities needed to enable use cases



IEDR Milestone Roadmap

NYSERDA Files the Updated Program Sponsor Implementation Plan
(October 2021)

IEDR Program Dashboard deployed
(October 2021)

Ongoing engagement with stakeholders through 1-1 and focus group sessions

Conduct Regular General Stakeholder Engagement Meetings
(Q4 2021)

NYSERDA launches Development RFP
(Q1 2022)

NYSERDA awards Development Contract & development begins
(Q2 2022)

First Public Iteration of the IEDR launched
(Q4 2022)

Incorporating the first 3-5 prioritized use cases

Phase 2 proposal filed
(January 2023)

Declare IEDR MVP
(Q3 2023)

Incorporating the up to the top 10 use cases

Phase 1 Status and Summary Report is filed
(July 2023)



40 Use Cases incorporated into IEDR
(July 2026)



IEDR Leadership Team



Program Sponsor and Steering Committee

The Program Sponsor and Steering Committee which includes the Department of Public Service are responsible for defining, initiating, overseeing, and facilitating the IEDR Program.

Areas of Focus

- Governance & Decision Making
- Vision & Achievement
- Collaboration & Coordination



Program Manager

The Program Manager is the entity responsible for organizing and administering IEDR design, development, and implementation.

Areas of Focus:

- Program Management & Controls
- Communications & Stakeholder Engagement
- Technology



Data Utility Advisor

The Data Utility Advisor is the entity responsible for providing third-party expertise and advice on the assembly and transfer of utility data to the IEDR and related matters.

Areas of Focus:

- Utility Coordination & Implementation
- Landscape Assessments
- Data Leadership





Poll 1: Aligning on IEDR Vision





Understanding Use Cases

Understanding Stakeholder Use Cases

A stakeholder use case is simply a description—from the user’s perspective—of a function of the system. Use cases should be simple and concise.

Use cases help explain how the system should behave and—in the process—help brainstorm what could go wrong (i.e., identify risks and challenges for implementing). They provide a list of goals, and this list can be used to establish the cost and complexity of the system.¹



A use case should include¹:

- The user's identity (or persona).
- The user’s goal.
- How the system should respond to an action.



A use case should not include:

- Implementation-specific language.
- Details about the user interfaces or display.



Understanding Stakeholder Personas

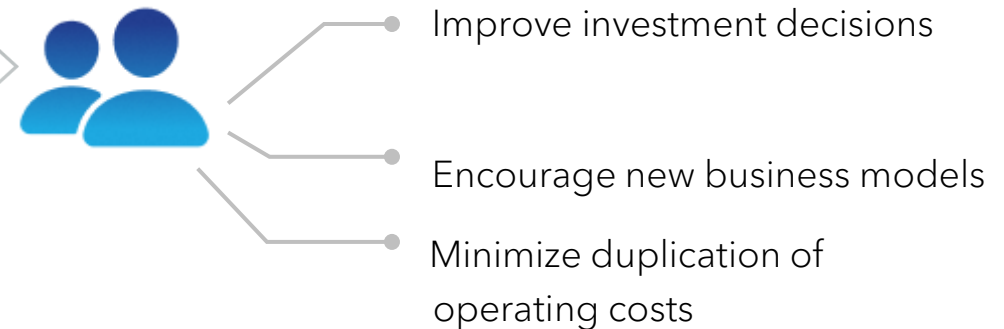
Use cases are like mini stories written from the user's perspective, so it's important to first spend time defining the different users who will be using the platform. Personas provide a reliable and accurate representation of key audience segments.

They **help guide decisions** about what data are included and at what **levels, navigation, interactions, and visual design**. For each persona, it is important to **identify their goals and motivation**, as well as **understand their expectations** for the functionality of the system. IEDR Personas may include:

Users **inputting data** into the system



Users **getting information** from the system



Example: Utilities sharing data related to energy usage, rates, or distribution system infrastructure

Example: Residential solar developer/installer using information to expand customer base or accelerate project implementation



Business Function Use Case Categories

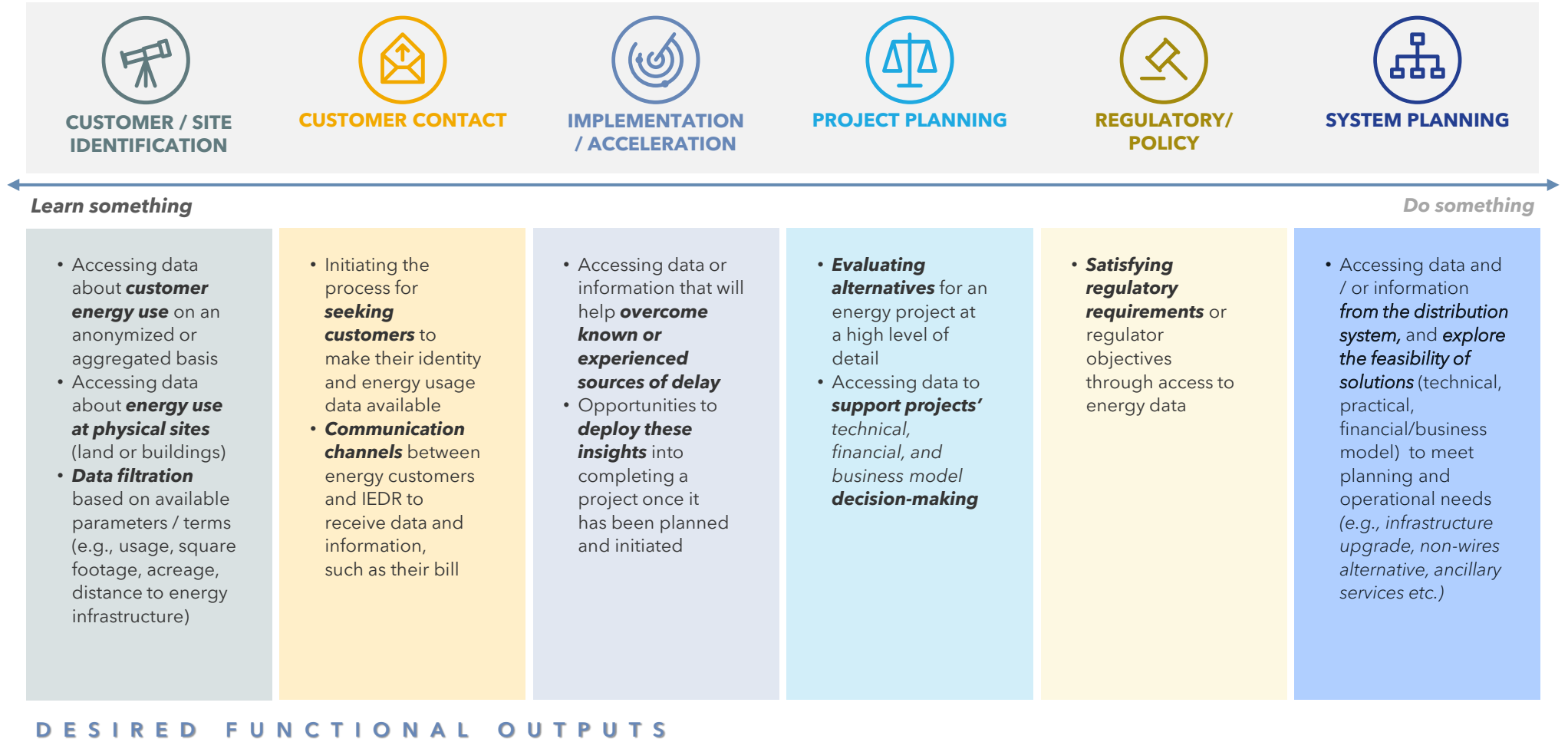
Energy: Information on usage, such as a meter reading and its associated data

Customer: Information that can support understanding who the customer is and their energy needs

System: Information on grid infrastructure and operations, such as the network location of feeders, transformers, substations, etc.

Tariff / Rate: Information on rates, incentives and programs available to customers based on energy use and other factors

SAMPLE
DATA
INPUTS





Poll 2: Confirm use case understanding



Use Case Template

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.

Title

<unique name>

Description

As a

<persona, role in a certain situation>,

I want

<verb> <noun> that describes an action that describes what you need from the IEDR,

so that I

<achieve some goal/benefit/value/reason>.



Understanding Stakeholder Use Cases (Cont.)

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.



Example of Customer Contact

Title

Grow the C&I Demand Response Program

Description

As a Utility or Demand Response provider	I want to review anonymized energy usage data for customers, filter to those whose usage profile aligns with available programs (need useable data on those) and initiate a request to them to share their identifying information and usage data.	so that I can enroll sufficient commercial and industrial participants into existing demand response programs (electricity or gas) to improve operational performance of the distribution system
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Understanding Stakeholder Use Cases (Cont.)

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.



Example of Regulatory

Title

Ability to Develop CO₂/GHG Coefficient for Compliance

Description

As an
NYC Official

I want to consolidate access to CO₂ emissions and intensity data for buildings, in order to develop a GHG (greenhouse gas) coefficient based on certain parameters

so that I can monitor and maintain compliance with New York City Building Performance standards and regulations and analyze future policy alternatives.



Understanding Stakeholder Use Cases (Cont.)

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.



Example of Project Acceleration

Title

Accelerated Clean-Energy Value-Add

Description

As a
residential
solar
developer

I want to accelerate the interconnection approval for planned / installed systems. I would benefit from an up-to-date hosting capacity analysis from the local utility, as well as access to the underlying feeder/system model so I can conduct my own analyses and be better prepared to offer suggestions to the local utility.

so that the project can begin delivering clean energy to customers as soon as possible



Understanding Stakeholder Use Cases (Cont.)

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.



Example of Site Identification

Title

EV Infrastructure Prime Location Identification

Description

As an
EV charging
infrastructure
developer

I want to accelerate and scale the process for identifying sites/opportunities for development of a variety of EV charging offerings. To do this, I need insights on consumer buying patterns of EVs, models of consumer driving/recharging patterns, real estate (land/MFH) information, building energy use (if MFH), and feeders or substations with the greatest capacity that support the kind of charging I am looking to develop

so that I can
filter/sort to a list of
best candidate
locations



Understanding Stakeholder Use Cases (Cont.)

What does this look like in action? We developed a template to standardize use cases across all stakeholders that will help identify critical development content in a way that is clearly and consistently articulated between the end users, system owners, and developers.



Example of Customer / Site Identification

Title

Accelerated Solar Site Agreements

Description

As a
Community
Solar
Developer (or
EPC),

I want to accelerate the process for identifying, selecting, and negotiating site agreements for projects. To do this, I need a reliable way to identify candidate sites based on minimum acreage thresholds, proximity to a distribution system interconnection, an up-to-date hosting capacity analysis form the local utility, as well as access to the underlying feeder/system model and sufficient insolation and accessible surface

so that I can deploy available capital more quickly and increase the amount clean energy available to NY electricity customers.





Poll 3: Exploring use cases

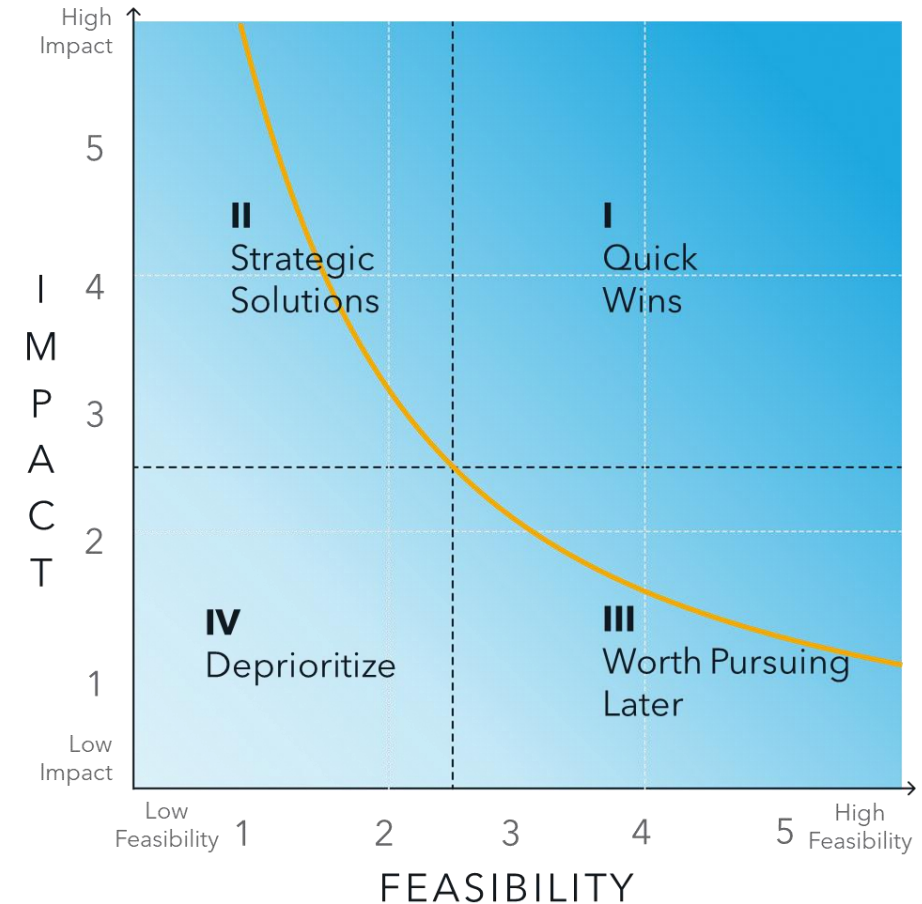
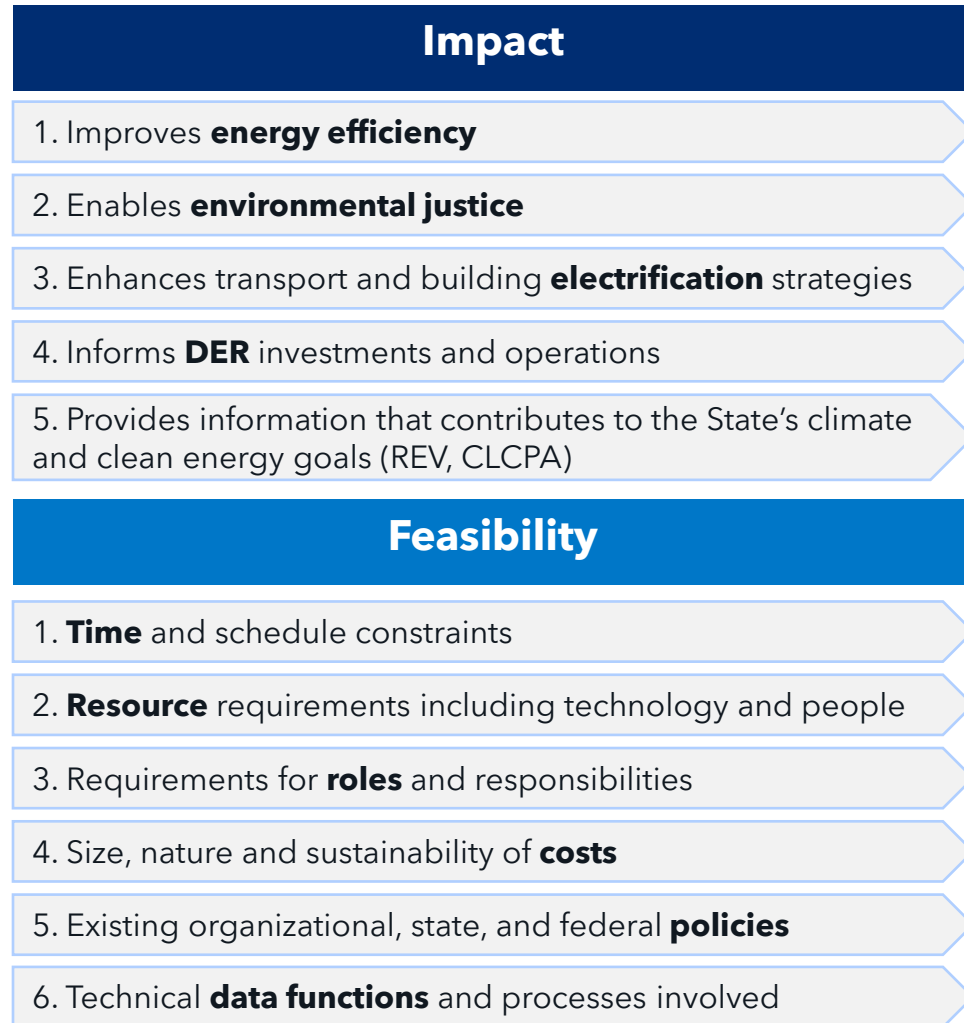




Prioritizing Use Cases

Initial Use Case Prioritization Framework

Use cases will be prioritized on a matrix that evaluates and scores use cases on their overall stakeholder impact and feasibility to implement.



The curved line shows the weighted values of impact and feasibility. Below the curve represents diminishing returns, above increased returns.





Poll 4: Feedback on prioritization framework





5 MINUTE BREAK

Please turn off your video and mute yourself during the break

Tips to Refresh

- Get up and stretch
- Jam out to some music!



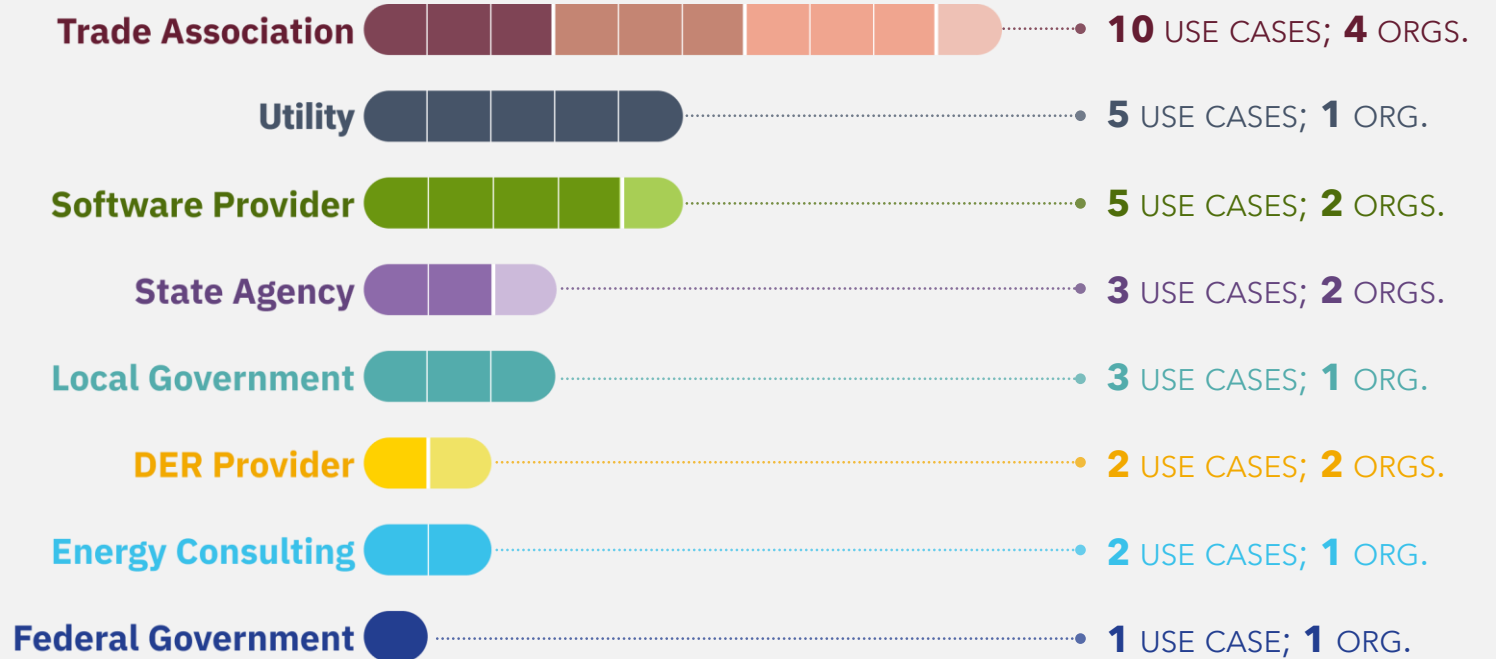
Reviewing Collected Use Cases

IEDR Use Case Submission Overview



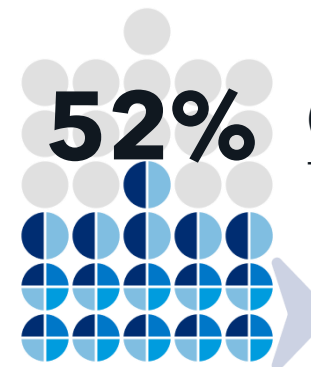
Use cases were submitted for phase I implementation by July 23, 2021, with contributions from **14** different organizations.

Organizations Represented



Each submission identified one or more related categories:

- Development & Use of DERs
- Energy Efficiency
- Building Electrification
- Transportation Electrification
- Utility Functions
- Local Government
- State Government



52%

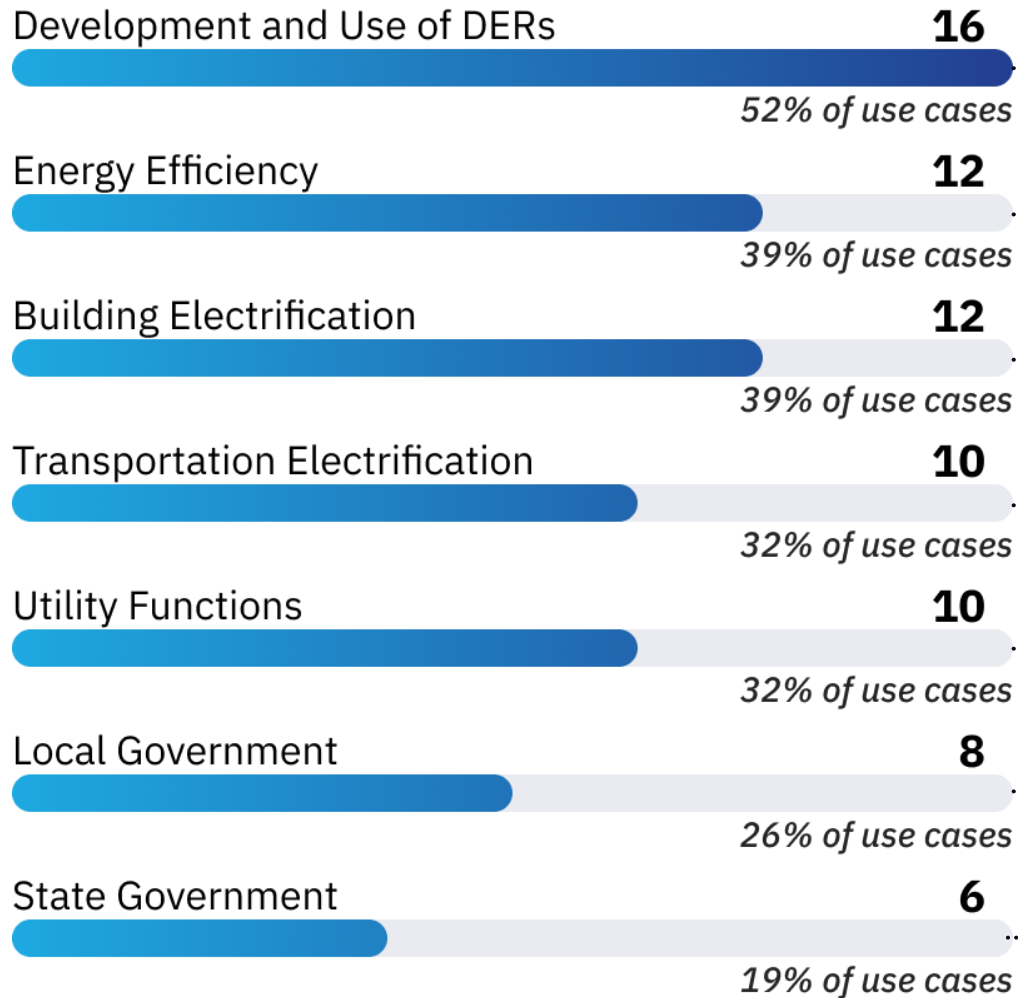
(16 of 31) submissions identified two or more related categories

10 submissions identified 4 or more related categories.



Use Case Current State Analysis

Use case submissions by technical competency:



Illustrative examples of use cases:

- Identify and engage potential DER customers; Monitor and evaluate the performance of DERs
- Compare customer energy usage data to baseline
- Engage energy consumers and managers in existing buildings
- Find potential locations for EV charging facilities
- Establish reliability benchmarking
- Utilize Small Building Data to Develop Decarbonization Policies
- Identify energy affordability opportunities in communities disproportionately impacted.



Use Case Current State Analysis: Key Takeaways

Use Cases should be specialized and function-specific

- Submissions must be further categorized and broken down into sub-categories to prioritize and implement
- Potential follow-up with individual stakeholders for more information

Greater focus on DER development and use with over 50% of submissions including this as a priority

- The most mentioned terms were “EV,” “energy efficiency,” “DER,” and “customer”

Average of 2 organizations per industry indicates close-to-even spread/representation in submissions

- Calculated from 14 organizations that participated in stakeholder survey

What organizations (if any) are missing from survey submissions?

- Environmental justice organizations
- Community-based organizations
- Local government representation outside of NY city





Poll 5: Additional use case sources





Open Forum



Wrap-Up & Next Steps

Immediate Next Steps

● Share meeting outcomes with your organization and network to spread IEDR awareness and outreach.

● Submit any additional use cases that you consider from your organization utilizing the NYSERDA use case template reviewed today.

● Express your interest! The next phase of our development will focus on small group sessions and interviews to further expand our understanding of use cases.

*To **get involved**, ask any outstanding questions, or share any additional feedback, please contact us at IEDR@nyserda.ny.gov. To **stay up to date**, please [join the IEDR mailing list](#) and [visit the IEDR public dashboard](#) for up to date information and upcoming events!*

