



Pathways to Decarbonization Program Board of Directors May 2020 Update

Presented to OPPD Board of Directors

Presented by Jeremy Bowers, Program Manager, Decarbonization

Presented on 5/14/2020

Decarb Agenda

- The need for an Initiative
- Objectives of the Program
- Project Capsules
 - Energy Portfolio
 - Internal Operations
 - Customer
 - Community
- The need for a Decarb Program
- Program Timeline
- Questions



Need for a Strategic Initiative (“SI”)

Board Resolution 6347, November 14, 2019 revised Strategic Directive 7 (SD-7) Environmental Stewardship.

Therefore, OPPD shall. . .

. . . Conduct all of its operations (including operations such as building services and transportation) in a manner that strives for the goal of net zero carbon production by 2050.

. . . Engage customers and stakeholders to promote energy conservation and efficiency and minimize environmental impact.

. . . Advocate and educate local state and federal governments to protect and advance OPPD’s environmental interests.

NEBRASKA

Nebraska utility bets on technological advances to meet carbon-cutting goals

- Energy News Network, December 5, 2019

Omaha Public Power District Commits To Net Zero Carbon By 2050

- NET News, January 6, 2020



Objectives

OBJECTIVES - PROGRAM



Actionable pathways for future decision making – carbon reduction.



Develop strategy (roadmap) for decarbonization product plan.



Decarbonization values become sustainable business practices.



Customer demand for decarbonization products increases.



Cited as both community and industry leader in decarbonization efforts.

Net Zero.



Decarb: Energy Portfolio



Project Manager – Colton Kennedy

This project will employ a data driven approach to study actionable pathways which eliminate or significantly reduce greenhouse gas emissions required to serve customer energy requirements.

- Reliability and resiliency modeling.
- Economic, rates, and emissions modeling.

A pathway is a set of resource decisions over time that achieves the desired outcomes.



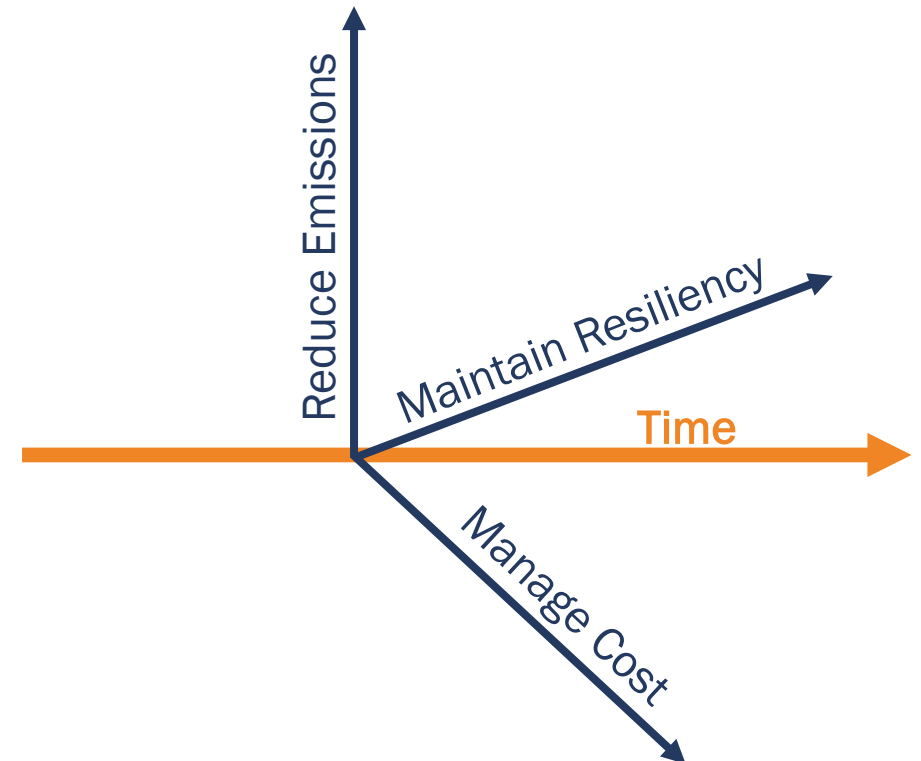
Resource Summary

Total Personnel Involved = 37 (+SMEs*)

Total Personnel Hours = 23.5k

Milestones and Deliverables

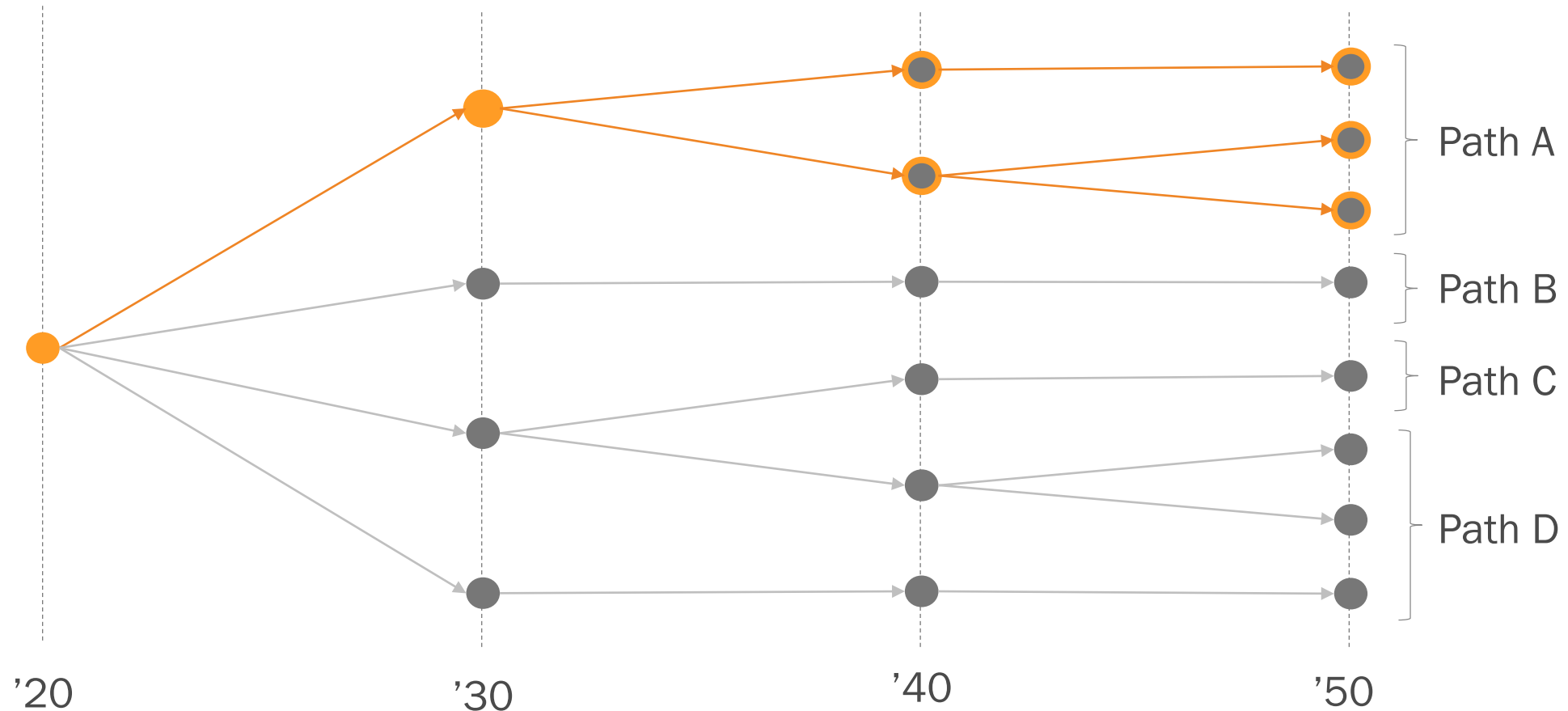
- Selection of External Oversight Committee Q2 2020
- Decarb Pathways Study Complete Q4 2021



Decarb: Energy Portfolio (cont.)



The Pathways Concept



Decarb: Energy Portfolio Personnel



Technology Exploration & Assessment

Scott Eidem, EPND	Ryan Stigge, EPND
Courtney Kennedy, EPND	David Aderemi, EPND
Guy Lucey, ED	Mike King, CS
Matt Hurlbert, FSBU	Bob Holmes, PA
Michael Lisowyj, EPND	



Integrated Modeling & Data Visualization

Steve Brown, BTBS	Krishna Baluswami, BTBS
Brad Underwood, FSBU	Sarah Riley, BTBS
Volker Schulz, BTBS	TBD, FSBU
Max Triba, FSBU	
Jon Shipman, FSBU	



System Reliability & Resiliency

Dan Lenihan, ED	Doug Peterchuck, ED
Aaron Smith, ED	Steve Bley, EPND
Josh Verzal, ED	Craig Longua, EPND
Tim Uehling, EPND	
Steve Hohman, ED	



Stakeholder Engagement & Communication

Tim O'Brien, PA	Laurie Zagurski, PA
Kate Thomas, PA	Luke Haner, ED
Joe Lang, PA	Corey DeJong, CS
Heather Siebken, CS	Michaela Valentin, PA
Brook Aken, PA	TBD, PA

Decarb: Internal Operations



Project Manager – Jessica de la Torre

This project will create a base year greenhouse gas inventory for OPPD to form basis for monitoring progress towards net-zero carbon.

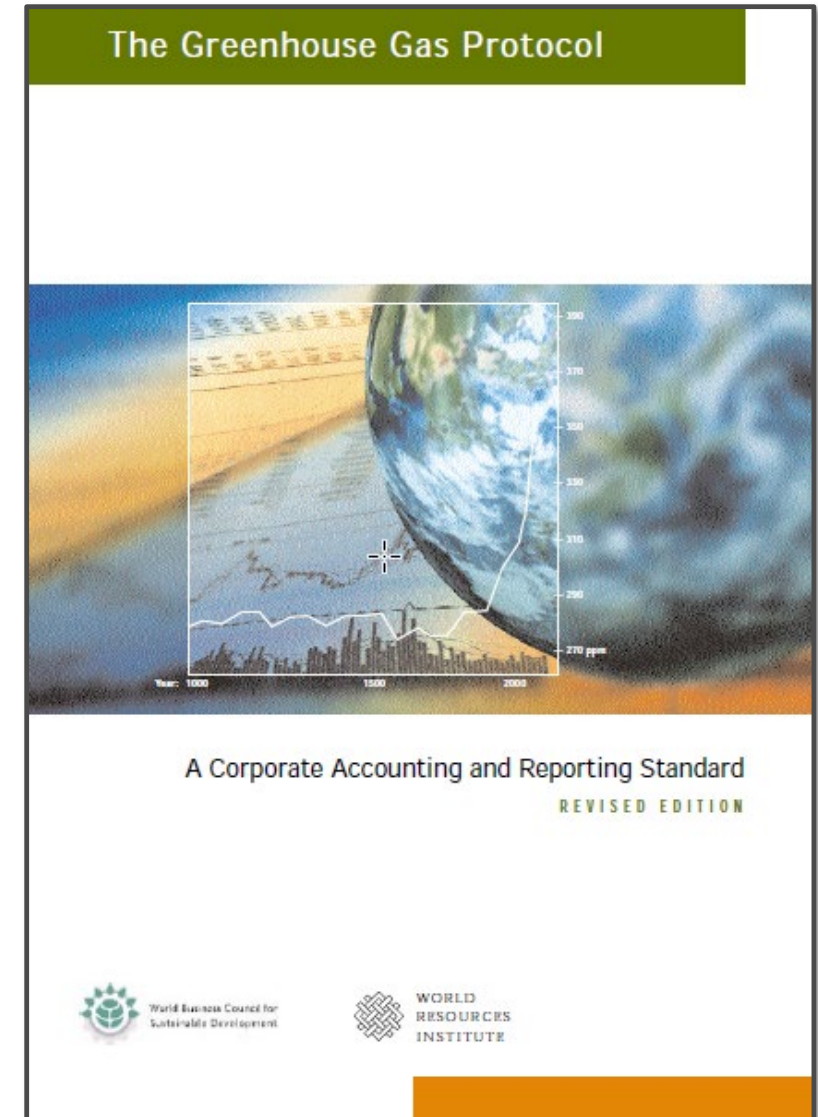
- GHG Protocol Corporate Accounting and Reporting Standard.
- Transition inventory and reporting to business to ensure repeatable and certifiable yearly.
- Initial scoping and characterization of projects to reduce OPPD's largest non-generation emission sources.
- Partner with business to build/revise current business processes to reflect OPPD's prioritization of reducing carbon impact.



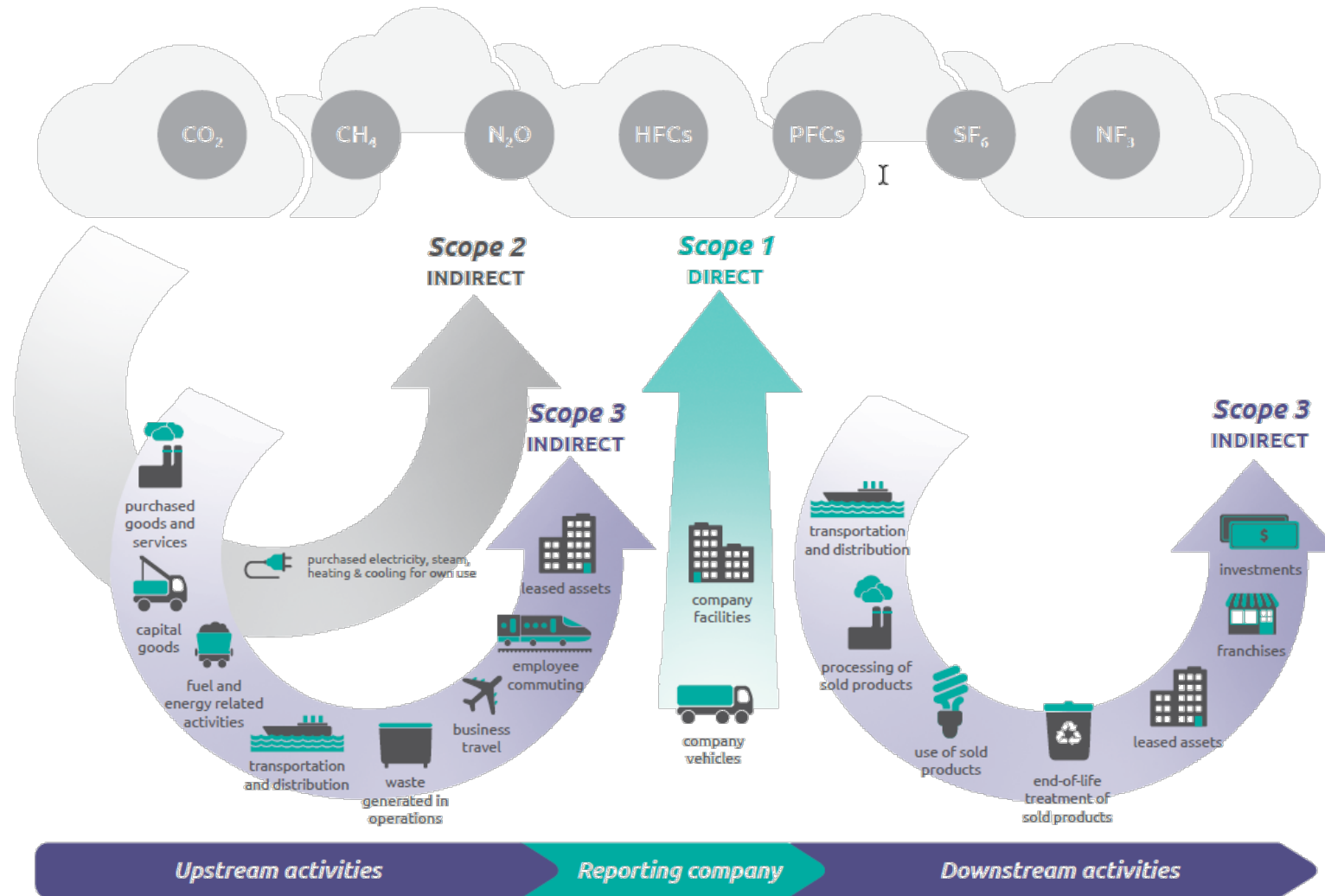
Resource Summary

Total Personnel Involved = 21+

Total Personnel Hours = 6.3k



Decarb: Internal Operations (cont.)



Source: Figure 1.1 of Scope 3 Standard.

Decarb: Internal Operations (cont.)



Project Organization

- The project will be structured with an environmental team leading the work.
- Each specific emission source will have a team comprised of SMEs for that particular emission source with BI Analyst support where required.
- Communications will support throughout the project.



Preliminary Emission Sources Identified

- Transportation fleet (SC/FSBU); Scope 1.
- Building consumption: elec, gas, other (BTBS); Scope 2.
- Transmission and distribution losses (ED); Scope 2.
- Business travel (SC/FSBU); Scope 3.
- Employee commute (HC,BTBS); Scope 3.
- Purchased goods (SC/FSBU); Scope 3.
- Upstream transportation (Programs/EPND); Scope 3.
- Purchased power to end-users (FSBU/EM&T); Scope 3.

Milestones and Deliverables

- Base Year GHG Inventory Complete Q4 2020
- Document GHG Inventory Process Q4 2020
- 2020 GHG Inventory Complete Q2 2021
- GHG Project Scoping Complete Q4 2021

Core Team Resources

Jessica de la Torre	Project Manager
Russ Baker	ERA
Ashley Aerts	OD/Change Mgt.
Emily Muth	Environmental Lead
Bob Holmes	Environmental Team
Kerri Teter	Environmental Team
Andrew Mayo	Coordinate BI Support

Subject Matter Experts per Emission Source.

Decarb: Customer



Project Manager – Paul Fortney

This project will create and own a product strategy with the aim of a partnership between customer desire and OPPD’s decarbonization goals.

- Conduct market analysis, technology exploration, and industry and non-industry benchmarking.
- Review the Product Development and Marketing’s (PDM) product prioritization framework and model to ensure proper value is assigned to decarbonization product efforts.
- Deliver a product strategy and roadmap to meet both customer and OPPD decarbonization goals, including an acceleration plan.
- Ensure tracking and reporting of carbon reduction as a result of implemented products.



Resource Summary

Total Personnel Involved = 7 (+SMEs)

Total Personnel Hours = 4.9k

Milestones and Deliverables

- PDM Scoring System Aligned Q4 2020
- Decarb Product Portfolio Complete Q1 2021

Core Team Resources

Kyle Hoyle	CS-PDM
Judith Emswiler	CS-PDM
Michael Trautman	CS-PDM
Michael King	CS-PDM
TBD	Non-PDM
TBD	Non-PDM

Subject Matter Experts

Tim Rauscher	Sarah Lake
Michael Leary	Beth Hoyle
Kirk Estee	
Michael Herzog	

Decarb: Community



Project Manager – Russ Baker

This project will prepare the organization to *lead* the community as the recognized SME on decarbonization and environmental stewardship.

- Identify specific community organizations to play an active and educated role in setting policy and strategic direction.
- Document positions and strategies for advocacy based on *value to decarbonization*.
- Develop plan to support Product Development on strategies with large impact to community organizations.
- Develop plan to partner with pilot community to demonstrate and learn from broad applicability of certain product strategies (per Customer plan).



Resource Summary

Total Personnel Involved = 6 (+SMEs)

Total Personnel Hours = 5.0k

Milestones and Deliverables

- Identify Target Organizations Q3 2020
- Documented Engagement Strat. Q4 2020
- Plan for Pilot Communities Q4 2021

Core Team Resources

Emily Muth	PA-ERA
Laurie Zagurski	PA-EcD and Ext. Rel.
Steve Sauer	CS-CSS
Todd McLochlin	CS-GI
Brooke Aken	EcD and Chamber Orgs.

Multiple Subject Matter Experts throughout the District engaged in a variety of organizations.

Decarb: Program



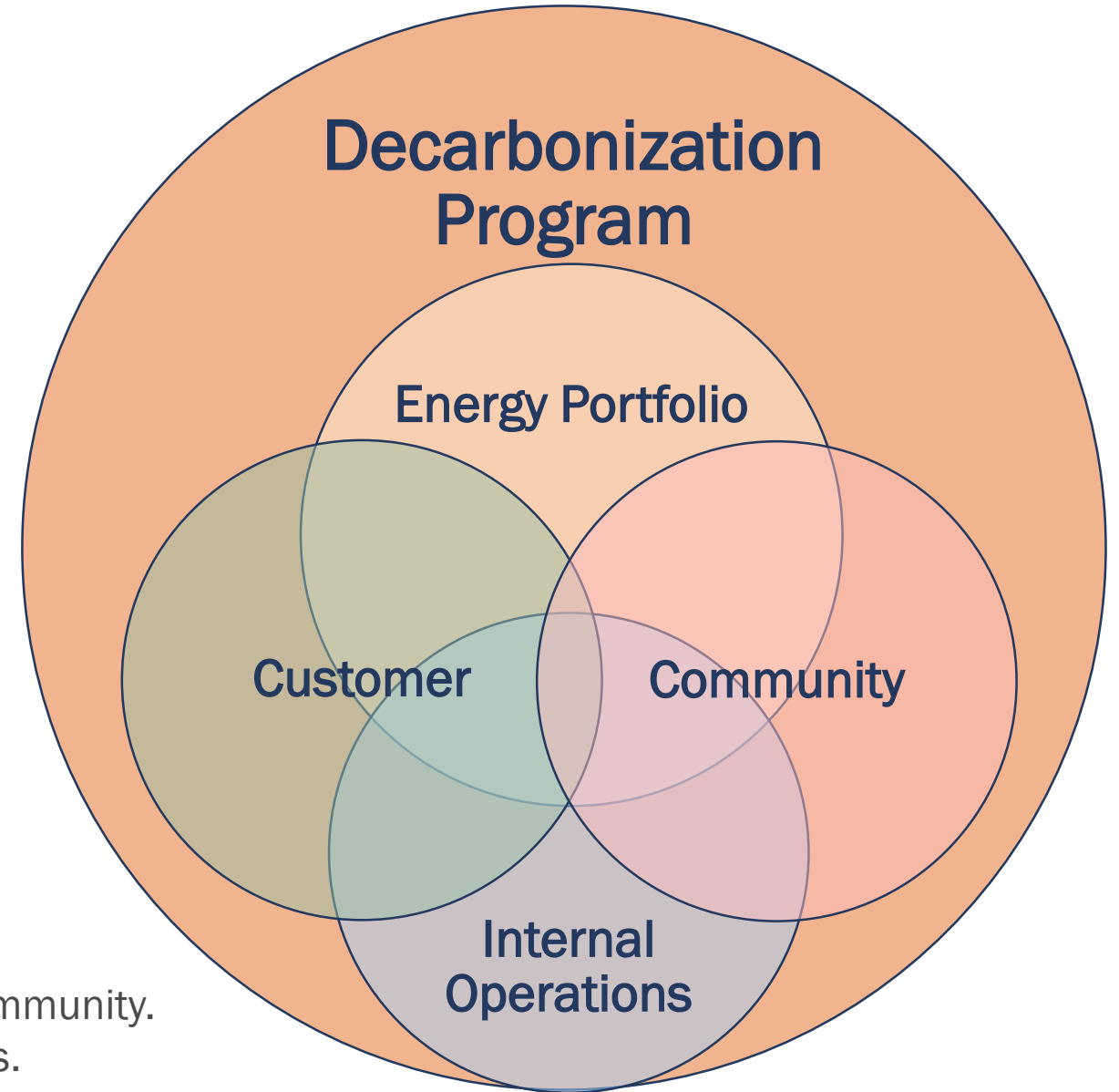
Program Functions

- Consistent assumptions and inputs.
- Eye on industry alignment.
- Coordinate with other strategic planning efforts.
- Consistent accounting methodologies.
- Single voice and point-of-contact.
- Integrated Decarbonization schedule.
- Assist in plans to operationalize.
- Administrative and organizational support.



Project Relationships

- GHG Protocol Accounting informs all projects.
- Customer and Community efforts potential off-sets.
- Energy Portfolio and IO form leadership position in Community.
- Customer Decarb influences Energy Portfolio pathways.



Program Resources



Personnel Summary

- Total Personnel Involved = 72+ personnel
- Total Personnel Hours = 39.7k+ hours

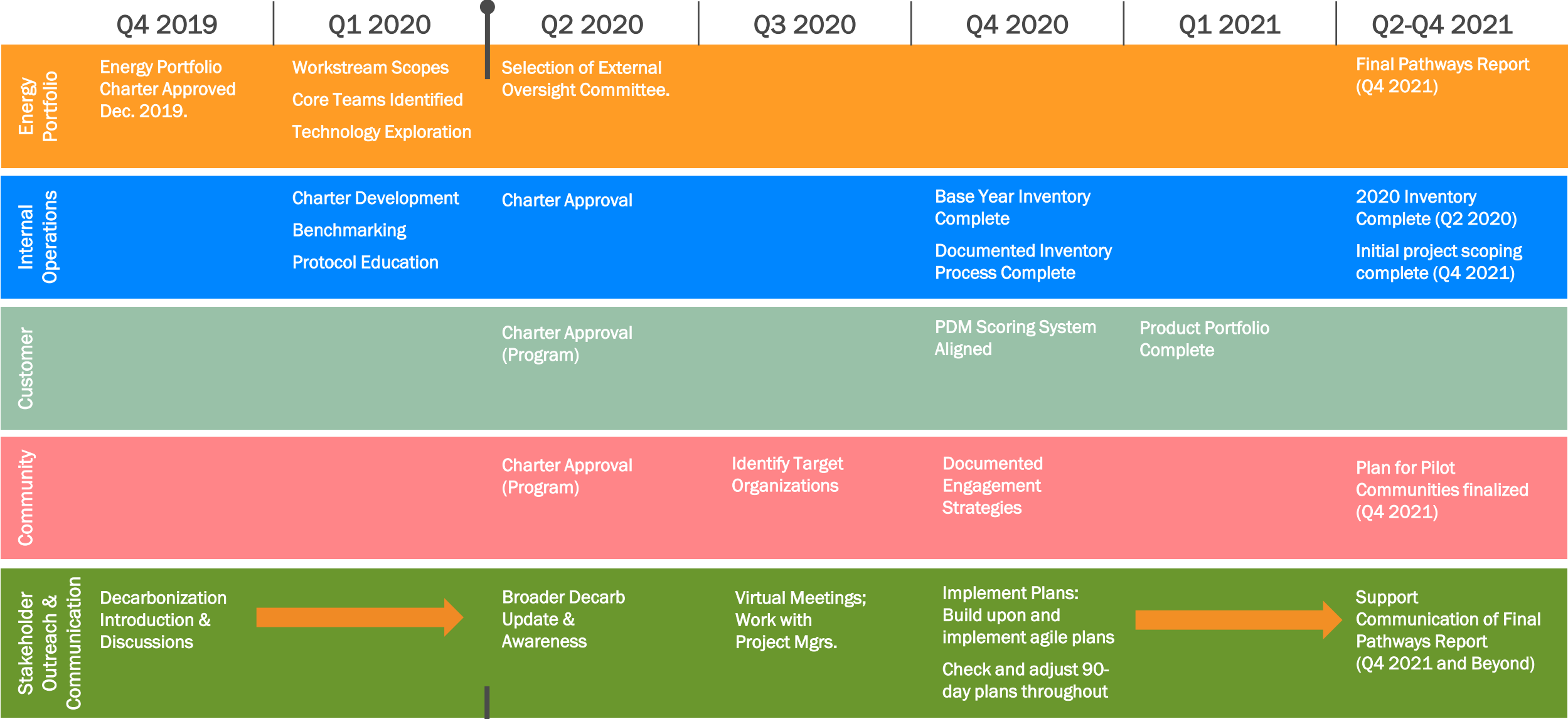


O&M Budget Projection

- 2020 Projection - \$1.1MM
- 2021 Projection - \$575k

Project	Personnel Summary	Total	2020	2021
Energy Portfolio Personnel	37 Total Personnel + SME	23.5k hours	9.3k hours	14.2k hours
Internal Operations Personnel	21 Total Personnel (includes currently identified emission sources)	6.3k hours	5.5k hours	800 hours
Customer Project Personnel	7 Total Personnel + SME	4.9k hours	3.4k hours	1.5k hours
Community Project Personnel	6 Total Personnel + SME	5.0k hours	1.7k hours	3.3k hours
(+1 Program)	TOTAL ESTIMATED EFFORT	39.7k hours	19.9k hours	19.8k hours

Program Milestone Timeline



TODAY

*Regular SMT/BOD Check-ins throughout Q2 2020 to Q4 2021



Questions, Comments, Input

