

Agenda

Welcome

Andy Agg
Chief Financial Officer

Delivering with real impact

Rudy Wynter
President, New York, National Grid

Our Clean Energy Vision

Ben Wilson
Chief Strategy and External Affairs Officer
& Bryan Grimaldi
Vice President, Corporate Affairs,
New York, National Grid

Q&A

hosted by **Rudy Wynter**

Coffee break

An integrated approach for a clean energy future

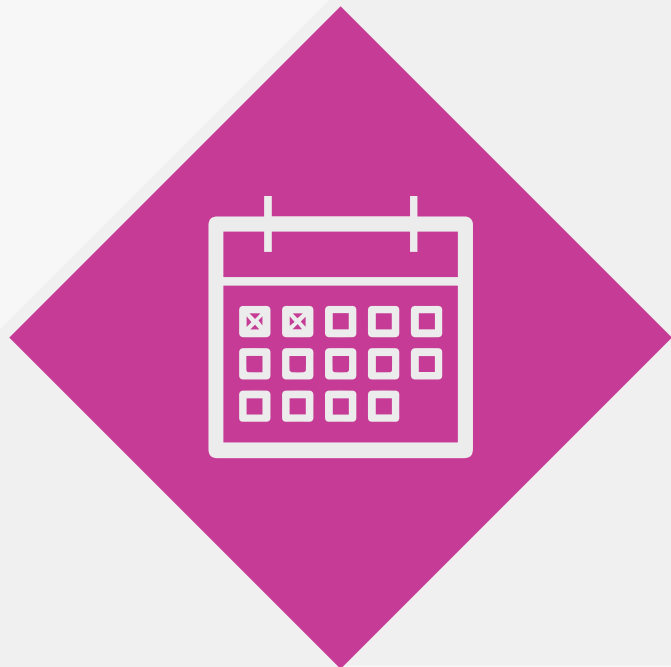
Cordi O'Hara
President, National Grid Ventures

National Grid Partners

Lisa Lambert
President, National Grid Partners

Q&A and closing remarks

Rudy Wynter





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US Investor Event

Real solutions for a fossil-free future

Andy Agg

Chief Financial Officer



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Real solutions for a fossil-free future

Rudy Wynter

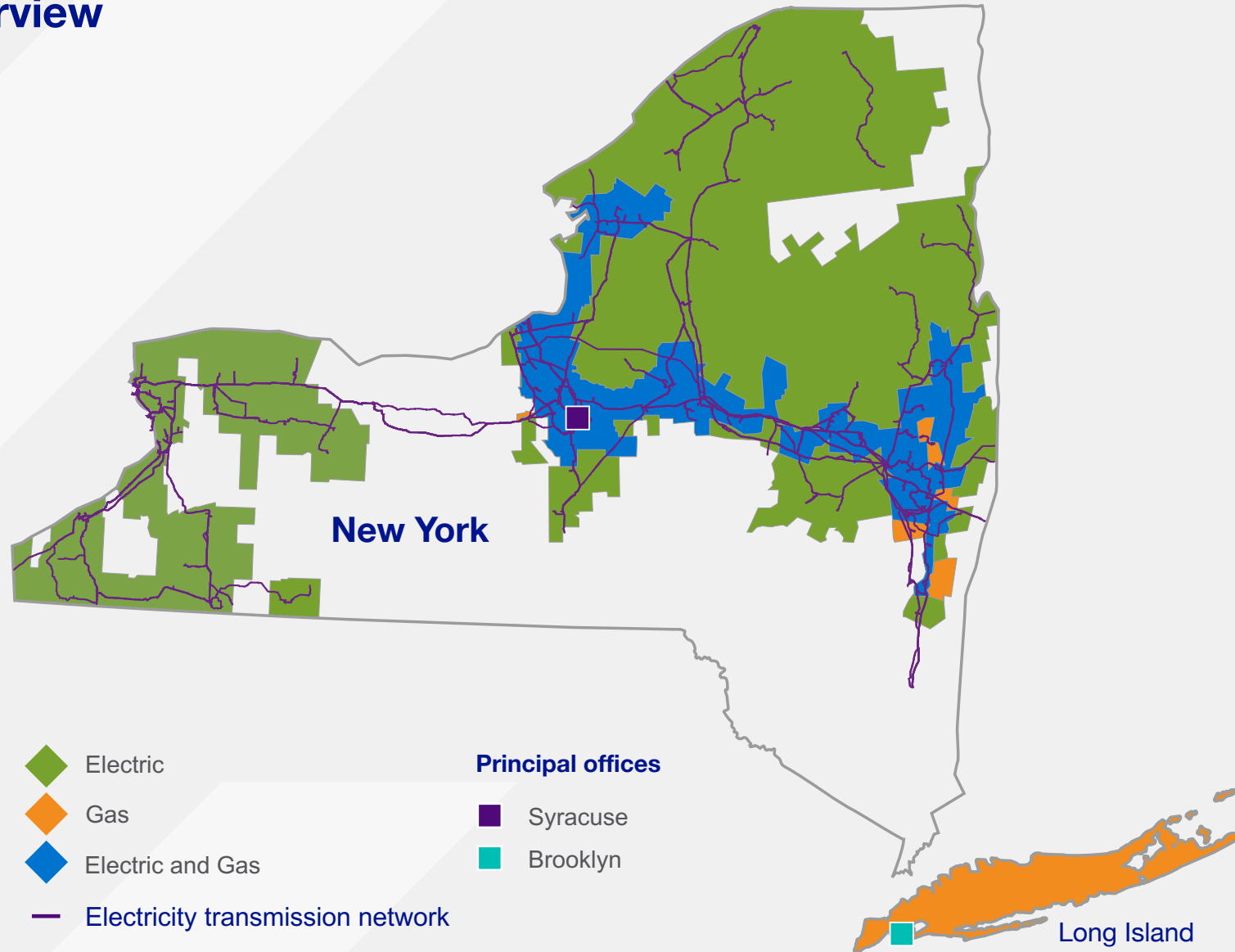
President, National Grid New York



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Delivering with real impact

Overview



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Real solutions for a fossil-free future

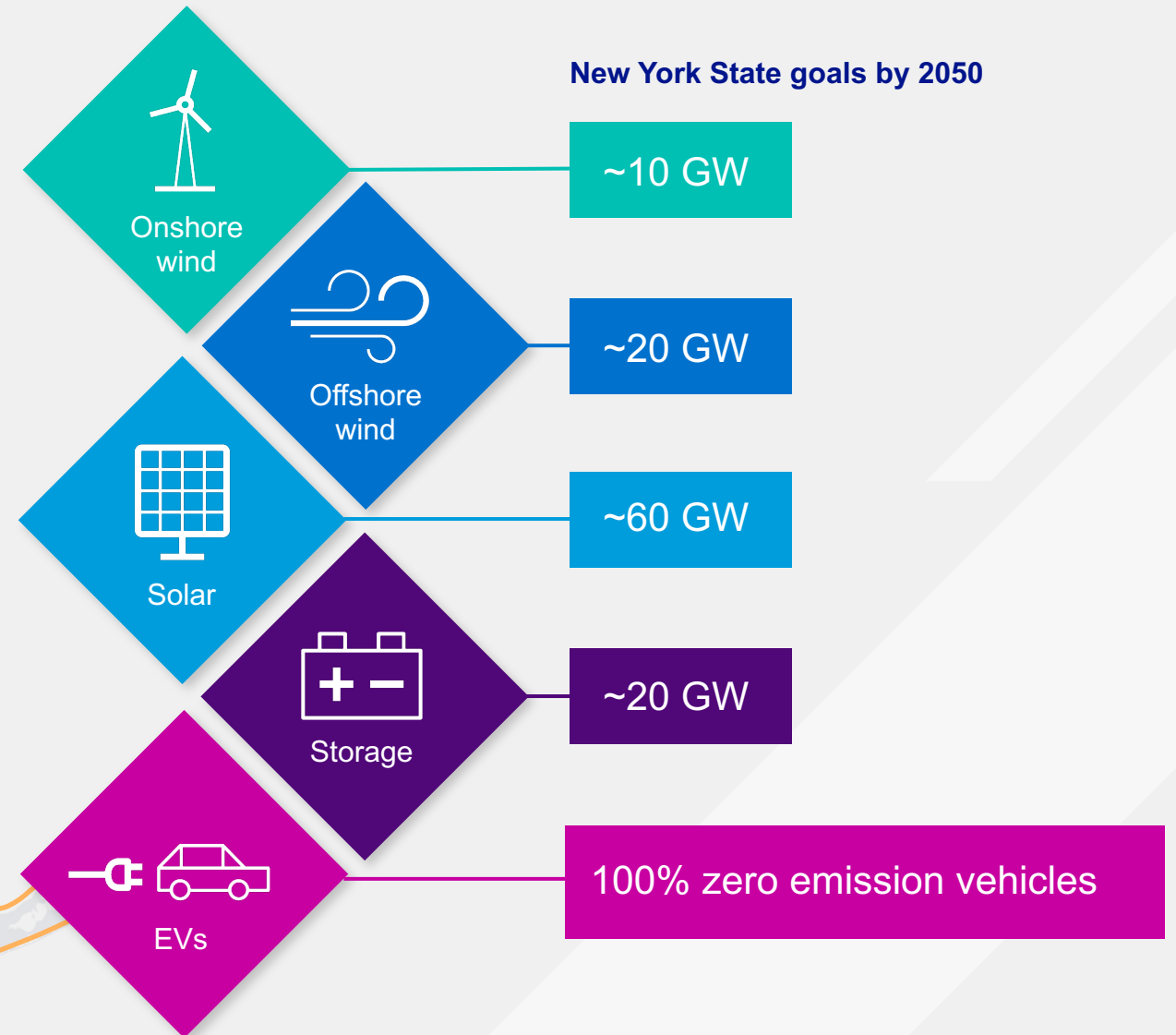


Delivering net zero – New York State targets

Climate Leadership and Community Protection Act (CLCPA)

- 100% zero carbon electricity by 2040 (85% by 2030)
- Reduction of at least 85% below 1990 levels GHG emissions by 2050

New York State goals by 2050



Progress on operational priorities

Consistently achieving 95% of allowed RoE and 7-8% asset growth

Underlying operational delivery (FY22)

Excellent reliability across our networks

- > Hit our reliability goals for the 14th consecutive year



Edison Electric Institute (EEI)
Emergency Response Award



2021 ReliabilityOne Award
for Outstanding Service

Achieved ROE 8.8%

- > 99% of allowed return

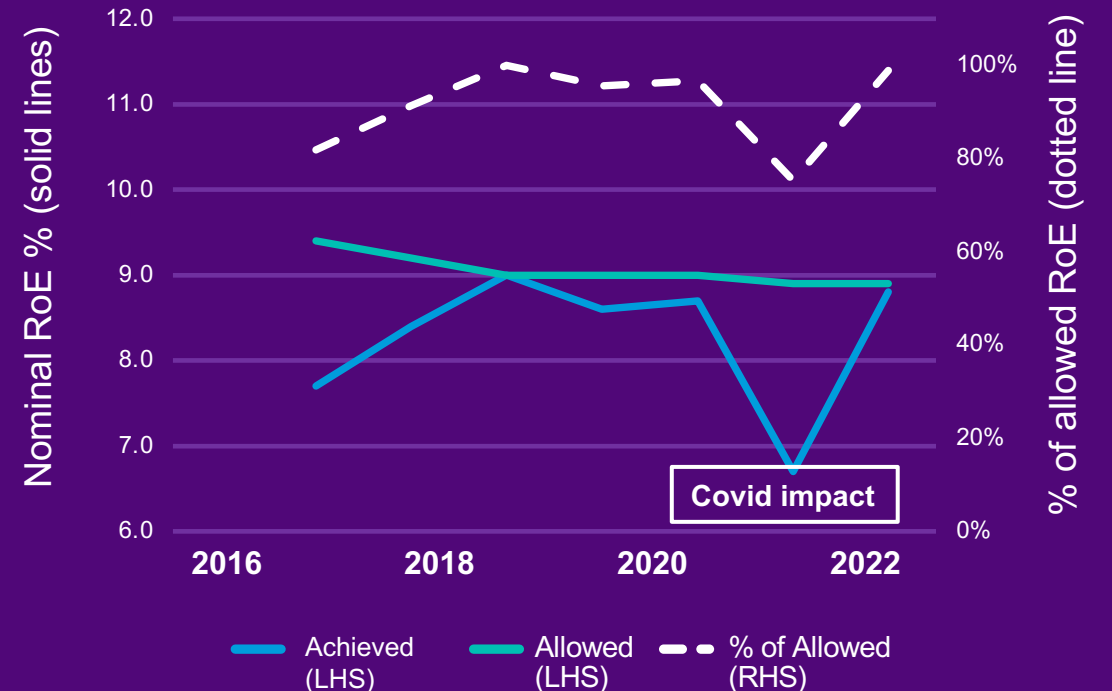
Capital Investment increased by \$300m to \$2.6bn

- > Rate base growth of ~8%

Managing our controllable costs

- > Delivering on our contribution to the Group efficiency program

New York Regulated RoE Performance



Our growth opportunities - the next 5 years

Core drivers of capex



Gas Distribution

- > 80% of investment is mandated for safety and reliability
- > Leak-prone pipe replacement



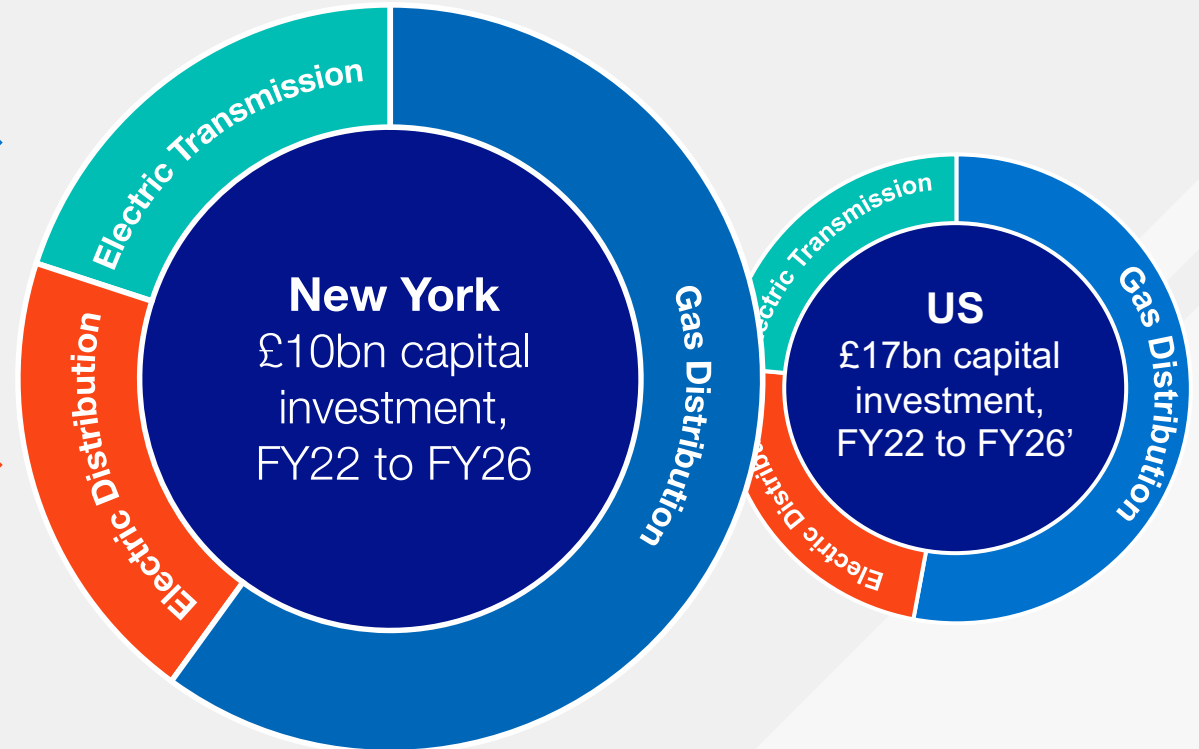
Electric Distribution

- > Mandated investment
- > Storm hardening
- > Increased electrification



Electric Transmission

- > Upgrading transmission to build New York's 'Green Super-Highway'



2/3rd of New York capex is aligned with EU Taxonomy principles of sustainable investment

Forward look to 2026

Driving Growth

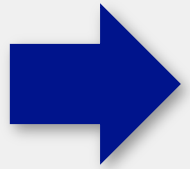
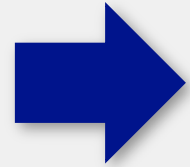
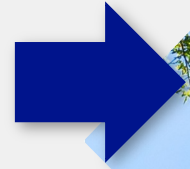
- › Strong investment drivers to maintain safety and reliability
- › Strong capex drivers to help deliver the energy transition

Driving Efficiencies

- › New York targeting £175m savings over the next 3 years
- › ~£45m delivered since FY21

Driving Innovation

- › Through strong partnership with NGP
- › 'Linevision' – increasing grid flexibility, managing congestion
- › AI - 'Urbint', using AI to increase safety; vegetation management



FY22 to FY26

Rate base growth
8% CAGR

Underlying profit growth
8% CAGR

A responsible business at the heart of the energy transition

A fair and equitable energy transition across New York State



Delivering for our customers

- Minimizing customer bill impacts
- Support through COVID
- Over \$100m in energy efficiency programs
- New York State 'Solar-For-All' program



Stronger collaboration with stakeholders

- Equity in Energy summit
- NYC Pathways to Decarbonization Report



Working with our people

- Improving our safety performance
- A diverse, inclusive and equitable workplace
- Hiring and developing skills for a net zero workforce

Project C - #StandForC

Our program to create a more equitable future for every customer in every community we serve

Supported 6,000 small businesses across New York



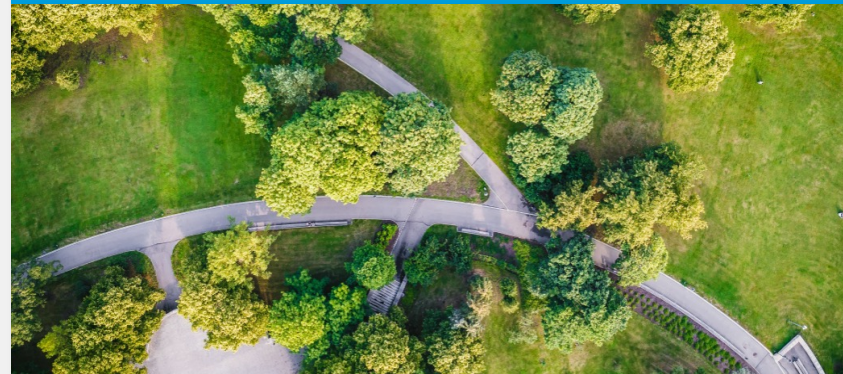
Project C - #StandForC

- Helping revitalise areas we serve by supporting energy, education and development projects
- Providing Technical Assistance Grants to support small, local businesses
- Preserving and sustaining local parks through our Adopt A Park initiative

Supporting 85 community partners & groups



Workforce training for 400 underprivileged children



\$7m support to initiatives across New York



15,000 volunteering hours targeted

Delivering for New York State

Strong operating performance



Strong financial performance



Significant growth opportunities



A clean energy future



Thank you

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Ben Wilson

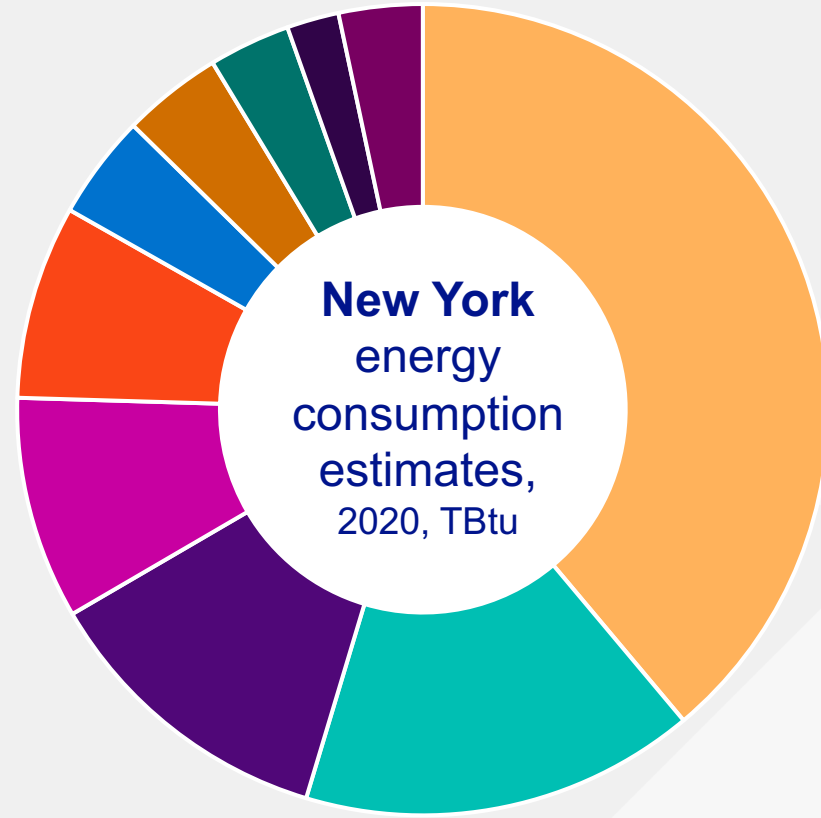
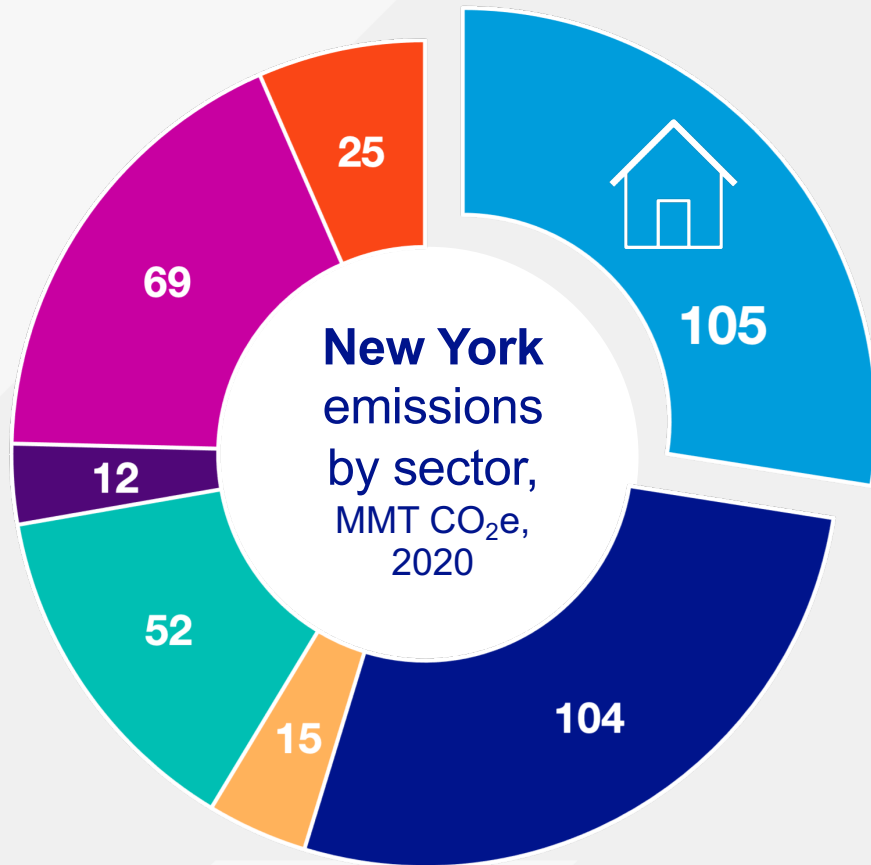
Chief Strategy and External Affairs Officer



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Clean energy vision
National Grid's plan for a fossil-free future

Heat is a large part of energy consumption



- Buildings
- Industry
- Oil & Gas
- Other
- Transport
- Electricity
- Agriculture & Waste

- Natural gas
- Gasoline
- Nuclear
- Fuel oil
- Hydroelectric
- Biomass
- Jet fuel
- Net electric imports
- Other renewables
- Other

Sources: New York emissions – IA Tech Supplement Annex 2. New York energy consumption - Energy Information Administration, State Energy Data System

A better way to net zero

Our plan for a fossil free future rests on four pillars



Pillar 1

Energy efficiency in buildings



We will continue to provide programs for our customers to accelerate energy efficiency improvements to buildings, including deep retrofits and measures that reduce peak gas and electric demand; and support more rigorous building codes for new buildings.

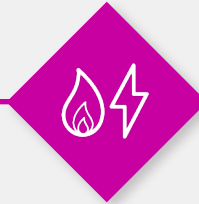


Pillar 2

100% fossil-free gas network



We will eliminate fossil fuels from our existing gas network no later than 2050 by delivering renewable natural gas (RNG) and green hydrogen to our customers.



Pillar 3

Hybrid electric-gas heating systems



We will support our customers by providing them strategies and tools to capture and maximize the benefits of pairing electric heat pumps with their gas appliance.



Pillar 4

Targeted electrification & networked geothermal



We will support cost-effective targeted electrification on our gas network, including piloting new solutions like networked geothermal. We will support customers who heat with oil and propane with strategies and tools to convert to heat pumps.

Benefits of a hybrid approach

Our vision is a more practical and achievable pathway to net zero for our customers

✓ **Lower cost:** Provides ~15 - 25% lower heating cost for customers

✓ **Leaves no customer behind:** Supports equitable outcomes for all customers by avoiding large, upfront retrofit costs

✓ **Leverages existing infrastructure:** Requires less electric infrastructure by leveraging existing gas network and customer heating infrastructure

✓ **More resilient and reliable:** Not all eggs in one basket



✓ **Less gas on a winter peak day:** Our plan uses less gas than high electrification during peak cold periods.

✓ **Utilizes skill set of our existing workforce:** Empowers gas workers to use skill set to achieve our shared net zero goals.

✓ **More likely to reach net zero by 2050:** Practical and achievable.

The vital role of our gas network

TODAY	2025	2030	2040	2050
Fossil-Free Gas	2%	10%	35%	100%
H₂	Neighbourhood demonstrations	Community scale projects	20% blend (target areas)	30% blend (100% clusters)
RNG	2% blend	10% blend	30% blend system-wide	70% blend system-wide
Customer Count	100%	100%	95%	90%
Total Gas Demand	98%	95%	80%	45%

A stable customer count means our gas network will play a key role in the energy transition to 2050 and beyond

RNG supplies are growing significantly

> RNG supply in the US is growing

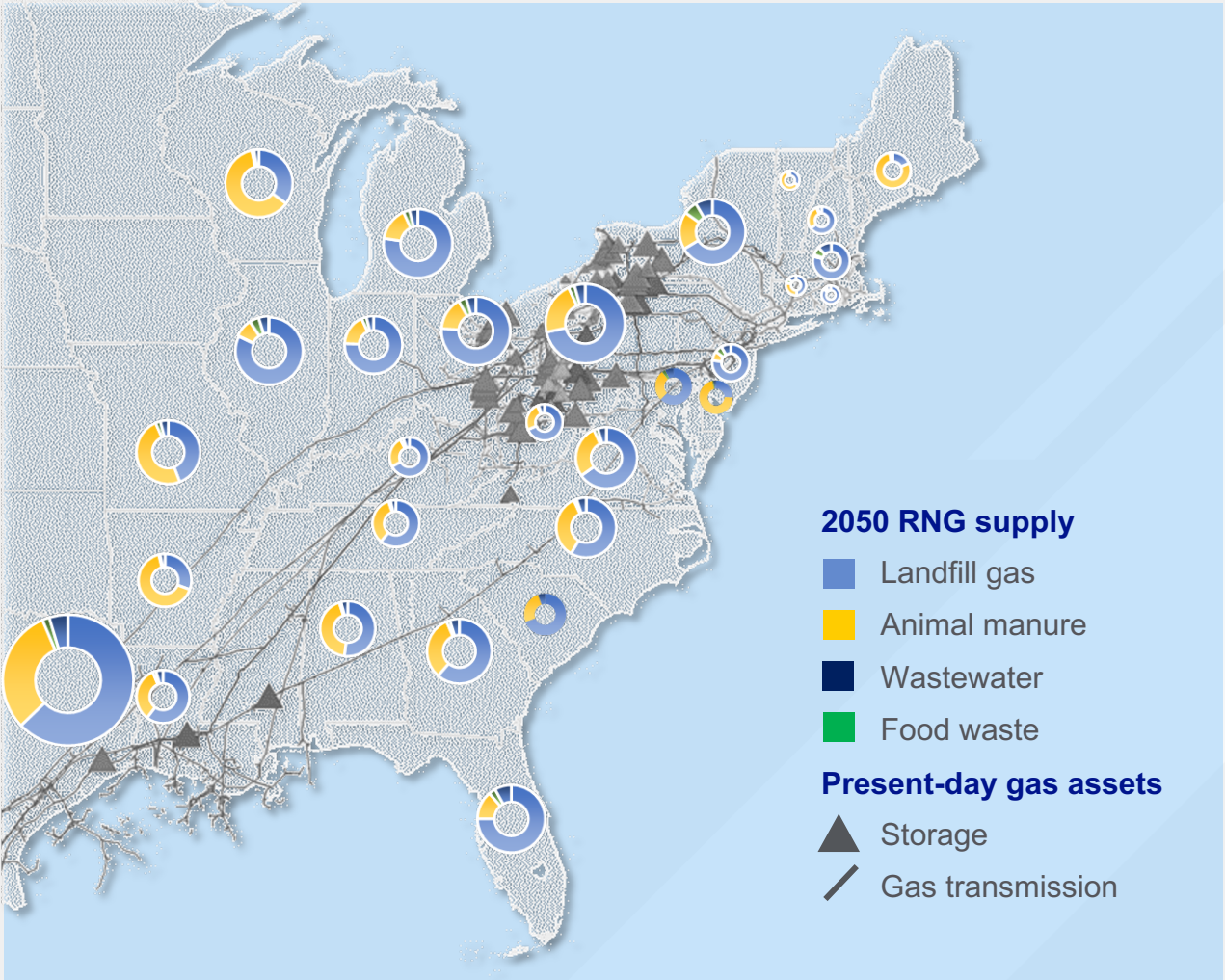
- Over 250 RNG facilities operating in the US and Canada today
- A further 110 are under construction

> RNG potential includes landfill gas, wastewater, food and agricultural waste, forestry residue – not energy crops

> Existing pipeline infrastructure can deliver volumes into the Northeast

> RNG lifecycle emissions are CO₂ negative

- -10 to 0kg CO₂e/MMBtu



Source: S&P Global

Evidence suggests RNG scale is achievable

> We account for 15% of residential and commercial gas demand in Eastern US

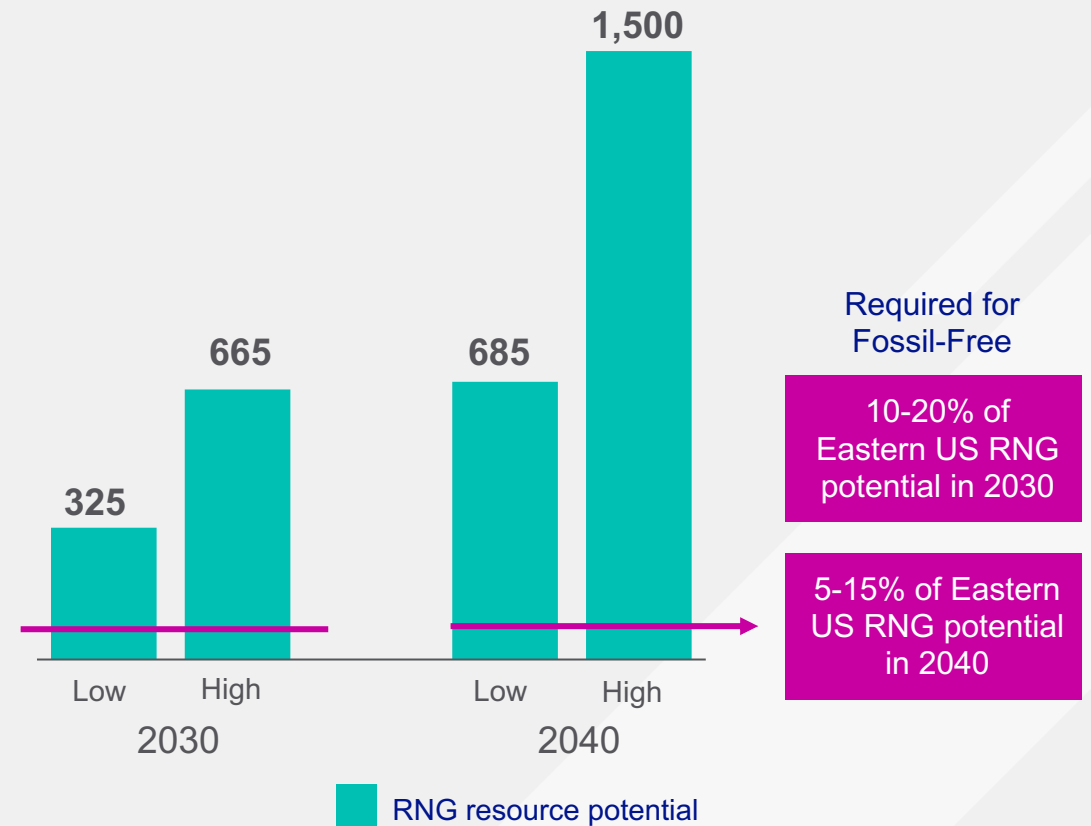
> To achieve our plan, we need to procure 10-20% of Eastern US RNG potential

National Grid Request For Information (RFI), May 2022

- > To validate estimates of RNG resource potential
- > Covers RNG and hydrogen projects in or pre-development
- > Responses received in June

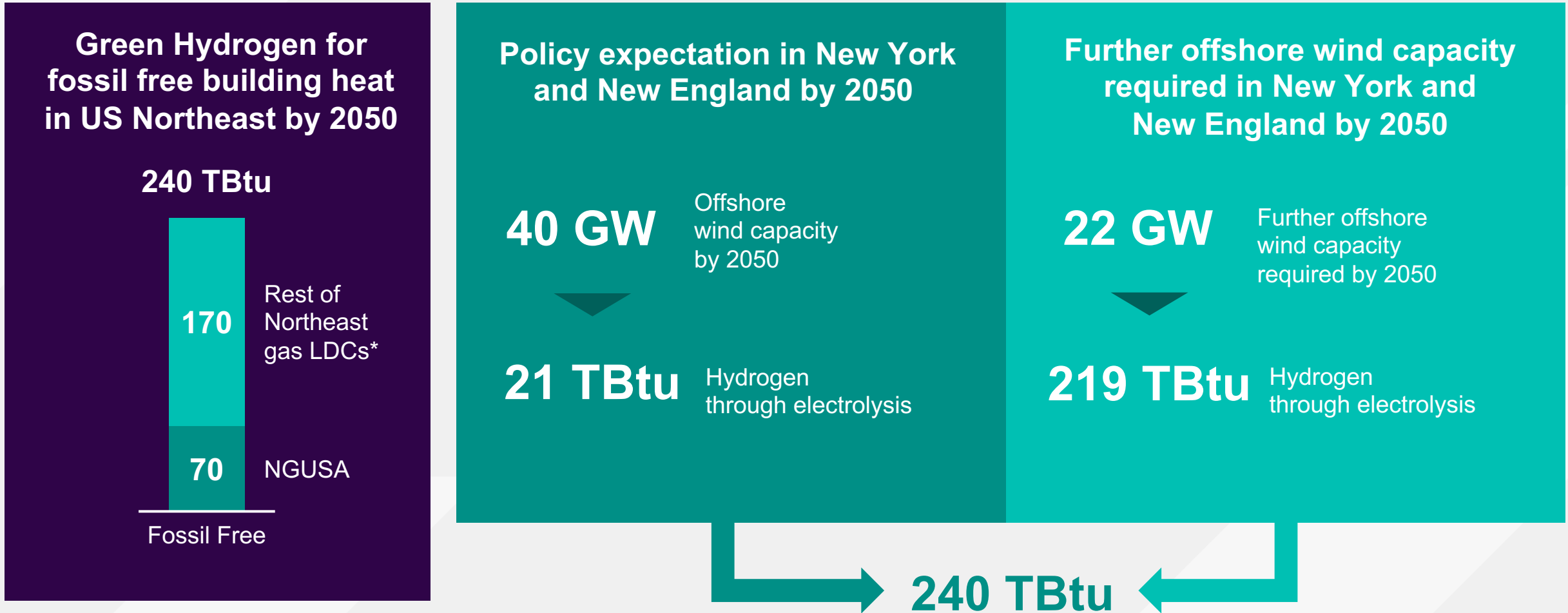


Forecasted RNG supply in Eastern US region (TBtu/yr)



Source: American Gas Foundation/ICF RNG Resource Potential Study (2019)

Planned offshore wind can jumpstart green H₂ production



Assumes (a) a 50% load factor for offshore wind generation, (b) 40GW supplies 5% of generation for hydrogen production; incremental 22GW supplies 100% generation dedicated to hydrogen production, (c) 70% electrolysis efficiency, 3.41 TBtu per TWh.
 *Local Distribution Company

A hybrid pathway means less electric capacity requirements

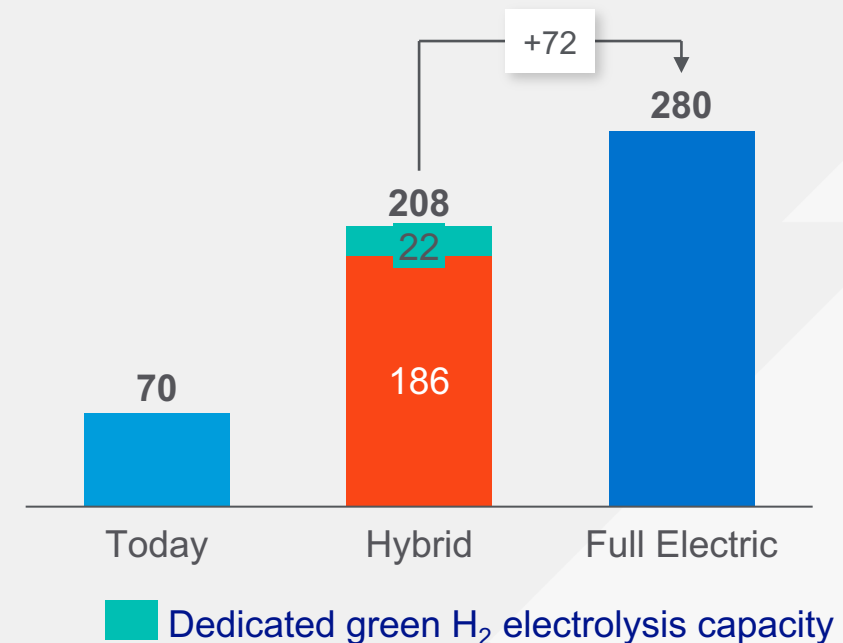
Lowering costs to customers

- Hybrid requires less new electric infrastructure
 - even when taking into account green hydrogen production

- Hybrid avoids nearly ~70 GW of new generation and transmission versus a full electrification pathway

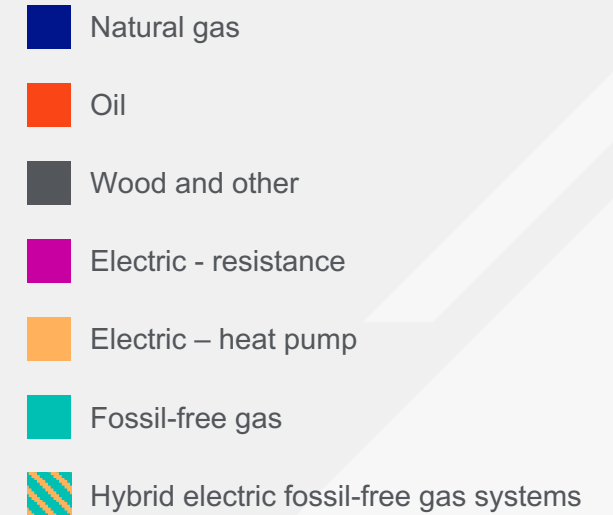
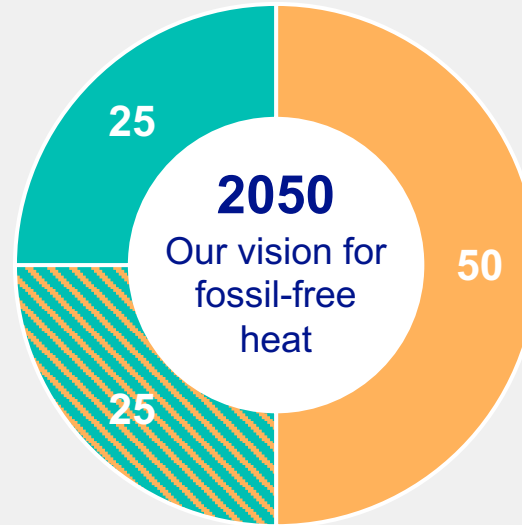
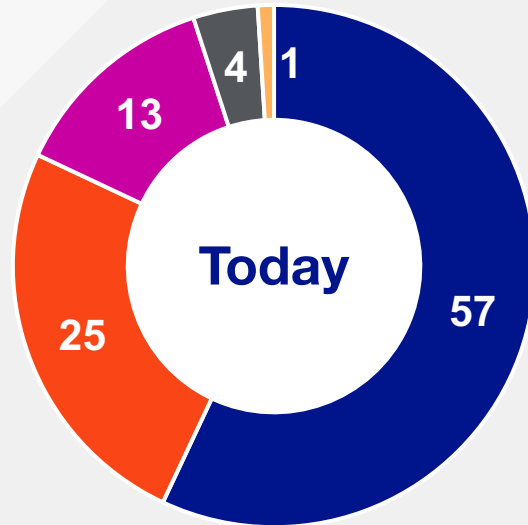
- This is more than today's NYISO/ISO-NE generation fleet

2050 NYISO/ISO-NE installed electric capacity for economy-wide load (GW)



Source: Based on Fig 29 of the Technical Supplement to the Draft Climate Action Council Scoping plan <https://climate.ny.gov/-/media/Project/Climate/Files/Draft-Scoping-Plan-Appendix-G-Integration-Analysis-Technical-Supplement.pdf>, and Fig 53 of the EEA Energy Pathways Technical Report <https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download>

Our vision for fossil-free heat by 2050



We can't achieve this by ourselves – we are:

- > Working with policymakers and regulators in New York and Massachusetts to realise this ambition
- > Engaging with all stakeholders and interested parties to seek support for our vision



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Real solutions for a fossil-free future

Bryan Grimaldi

Vice President Corporate Affairs, National Grid New York

We have a diverse gas customer base in New York

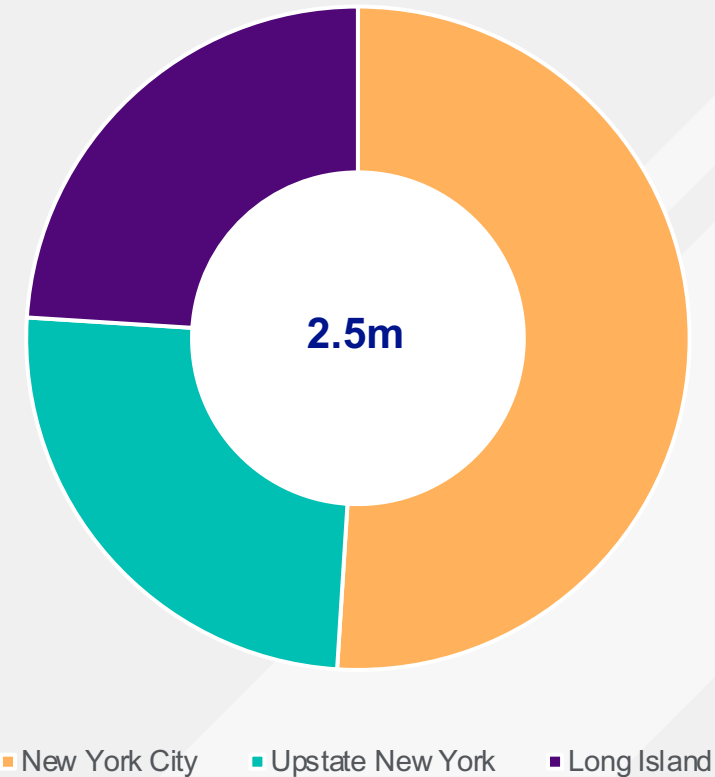
> We serve over 2.5 million gas customers across New York State

> We serve a diverse customer base:

The communities we serve

Queens	One of the world's most ethnically diverse areas
Brooklyn	Most populous borough in NYC with 2.7m people
Syracuse	Highest child poverty in US among cities with at least 100,000 people (48.4%)
Albany	National leader in nanotechnology and longstanding presence of IBM and General Electric
Staten Island	Second highest median income of NYC boroughs after Manhattan

New York gas customers



A hybrid pathway is more affordable

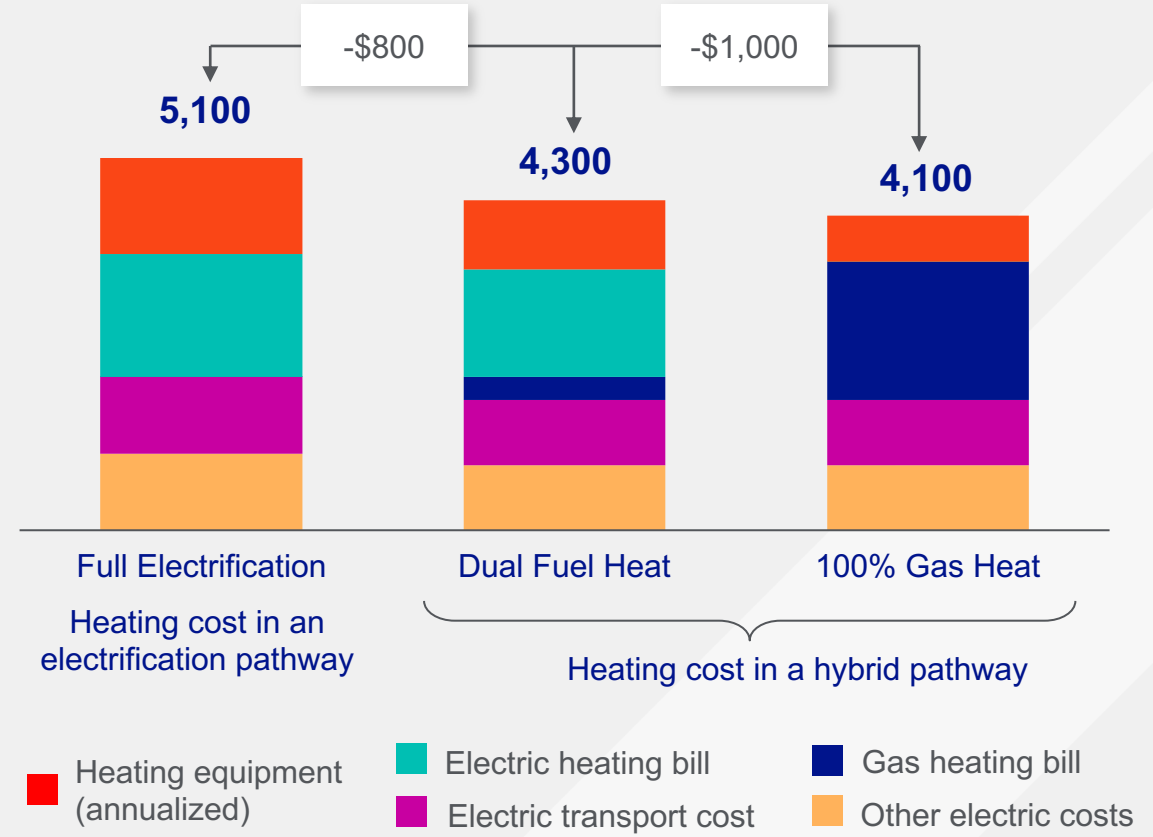
Lower costs for our customers

> By 2040, a hybrid pathway could mean 15-20% lower heating costs versus a full electrification pathway

> Progressive blending of clean gas over time keeps commodity costs manageable

> Increased building efficiency and avoided electric infrastructure investment also mitigates customer impact

Annualized total energy spend for a typical customer in 2040 (2021 \$)



Sources: [1] Bloomberg New Energy Finance, 2021; [2] In 2021, US Department of Energy launched the “Hydrogen Earthshot” initiative to reduce H2 commodity costs (excluding delivery) to \$7/MMBtu by 2030 (an 80% reduction vs today); Lazard “Levelized Cost of Hydrogen” 2021; [3] American Gas Foundation/ICF RNG Resource Potential Study (2019)

A hybrid pathway is more practical

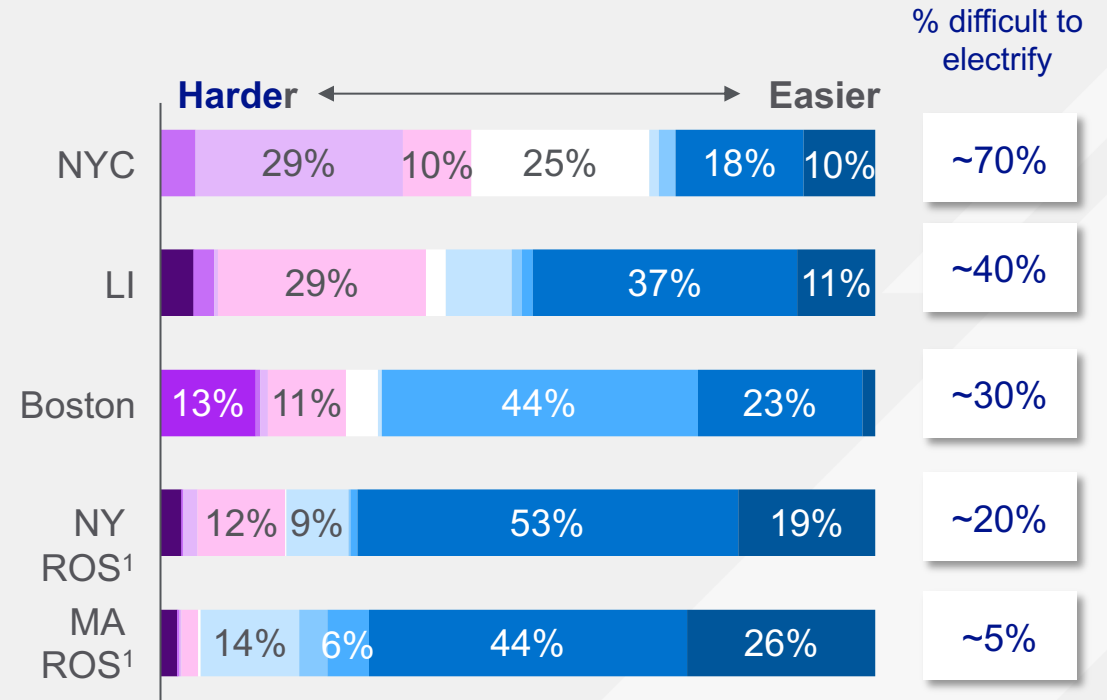
Building stock limitations prevent full electrification, particularly in urban areas

> The Northeast cannot electrify everything by 2050

> To electrify every single household would require the electrification of 9 million households by 2050

> Building stock presents challenges to electrification
 – particularly in urban areas where National Grid operate gas networks

“Ease of Electrification” for US Northeast building stock (% of square footage)



Source: ARUP Building Stock Assessment for National Grid (2021) [1] NY ROS and MA ROS reflect data for 'rest of state', excluding NYC and Boston.

How we are advocating to deliver the key outcomes in New York, Massachusetts and District of Columbia



1. Demonstrating thought leadership at events and in the media, led by our executives and subject matter experts.



2. Engaging deeply with elected officials and regulators to develop the supporting regulatory framework.



3. Building coalitions of allies to engage key stakeholders.



4. Transforming our media strategy and storytelling to be more proactive, building trusting relationships with reporters & outlets.



5. Generating community interest by increasing our presence in civic activities, community investment and events.



We have generated support from key groups...

UNIONS



“The National Grid vision protects good union jobs, creating new opportunities for the future of energy and paving the way to long-term economic growth”

– Constance Bradley,
AFL-CIO TWU Local 101

BUSINESS GROUPS



“[We] are eager to partner on actionable, practical solutions like this that will get us to net zero at the most affordable cost for our residents and businesses”

– Bob Rio, Associated Industries of
Massachusetts

ACADEMIA



“National Grid’s plan will enhance system reliability while simultaneously reducing the economy’s emissions of the destructive greenhouse gas methane”

– Tristan Brown, SUNY

...with positive stakeholder feedback

“The business community supports the steps that National Grid is taking to eliminate fossil fuels in a sustainable way that ensures affordable and reliable energy for all New Yorkers.”

Kathryn Wylde
President & CEO, Partnership for New York City

“Their [National Grid] plans to eliminate fossil fuels is a tremendous step in our continued efforts to transform our energy sector.”

Hon. Michael Cusick
Chairman of the Assembly Energy
Committee, New York State Assembly

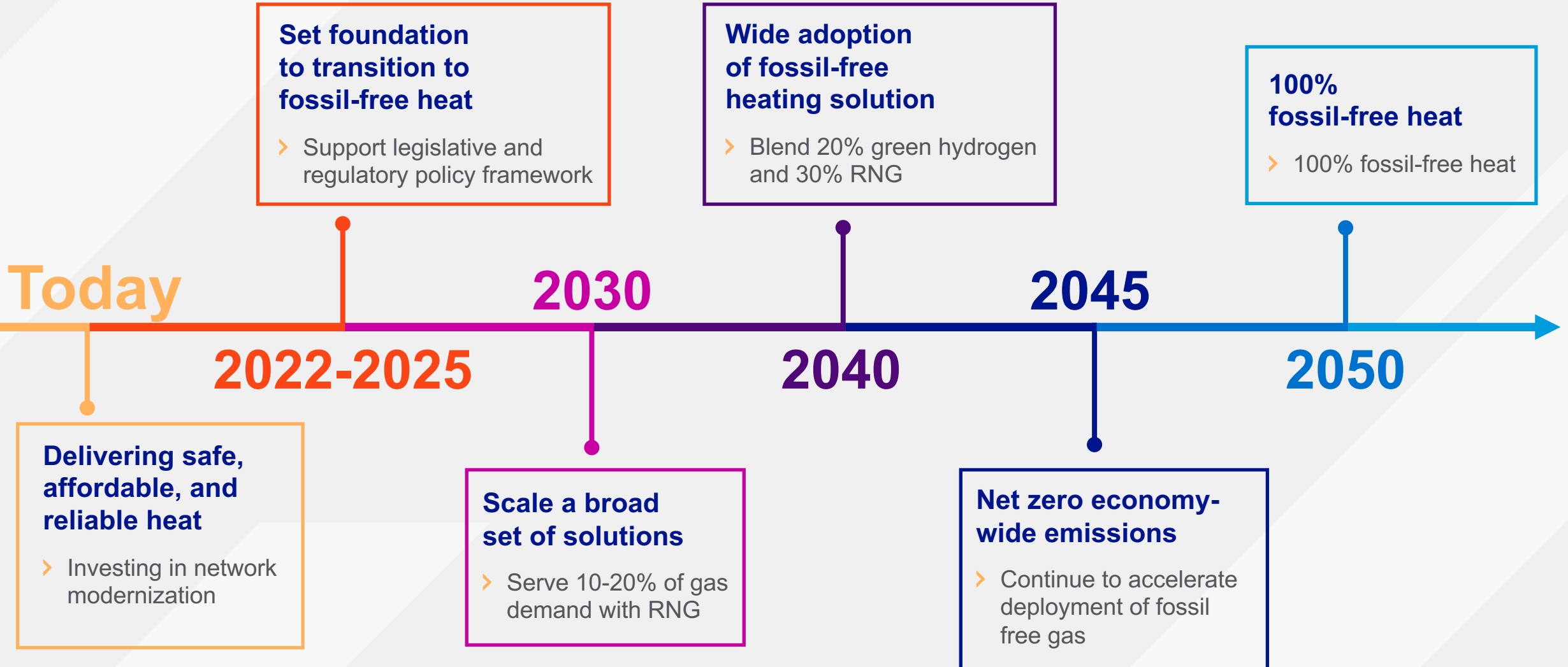
“I commend National Grid for taking a lead in the region in trying to balance our energy goals with affordability.”

Hon. Joseph C. Borelli
Minority Leader, New York City Council

“The National Grid vision protects good union jobs, creating new opportunities for the future of energy and paving the way to long-term economic growth.”

Constance Bradley
President of TWU Local 101

We are already on the pathway to a clean energy future





Clean Energy Vision

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Q&A



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Coffee Break



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Welcome back



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Cordi O'Hara

President, National Grid Ventures



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An integrated approach for a clean energy future

Overview of National Grid Ventures

National Grid Ventures is at the forefront of the energy transition. We operate in competitive energy markets in the UK and US.

We develop, own and operate the large-scale clean energy infrastructure that will accelerate society's drive towards net zero while at the same time helping to maintain security of supply today.

£2-3bn
Capex
FY2022-26

UK



8GW
interconnector
portfolio



Grain LNG import
terminal – largest
in Europe

US



1.3GW
US onshore
renewables



3GW US
offshore wind
capacity potential



3.8GW
Long Island
generation
capacity

Delivering net zero – New York State targets

Climate Leadership and Community Protection Act (CLCPA)

- 100% zero carbon electricity by 2040 (85% by 2030)
- Reduction of at least 85% below 1990 levels GHG emissions by 2050

Leading partnership for **Northeast Hydrogen Hub proposal** with MA, NJ, and CT



Hydrogen

New York State goals by 2050



Onshore wind

~10 GW



Offshore wind

~20 GW



Solar

~60 GW



Storage

~20 GW



EVs

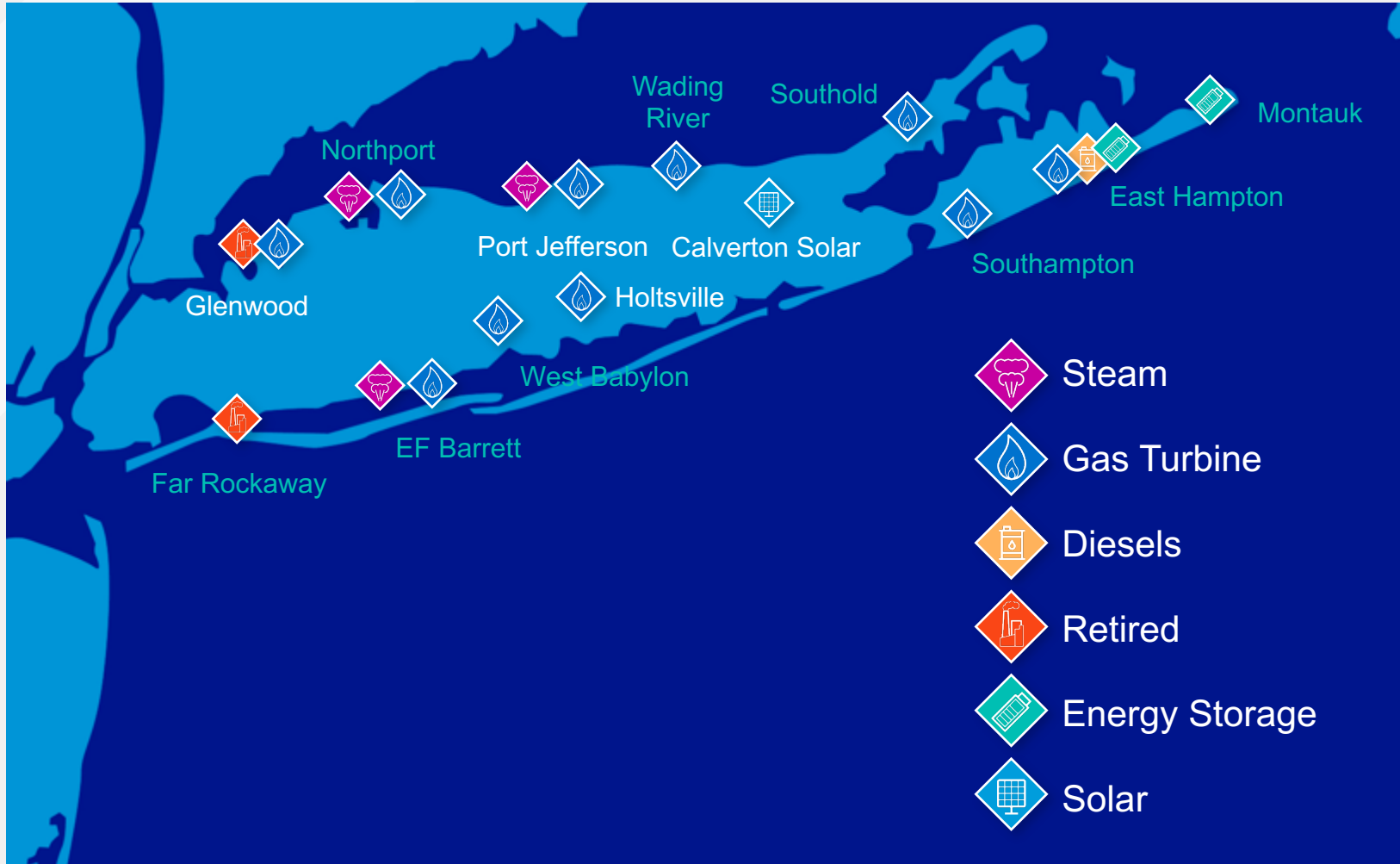
100% zero emission vehicles



We envision buildings powered by offshore wind and solar, and heated by green hydrogen. Energy stored by batteries and transported through modernized transmission networks.




Our unregulated positions in the US provide reliable and affordable electricity today and we are investing in renewable generation for the future



- > Under contract with LIPA* until 2028
- > CLCPA 100% zero carbon electricity by 2040

- > In active discussions with LIPA:
 - > Re-contracting
 - > Asset repurposing

National Grid operates
3.8GW
 of generation capacity
 on Long Island



*LIPA – Long Island Power Authority

We are investing in key partnerships that will advance clean electricity provision and enable transmission in order to meet state goals

Onshore Renewable JVs:

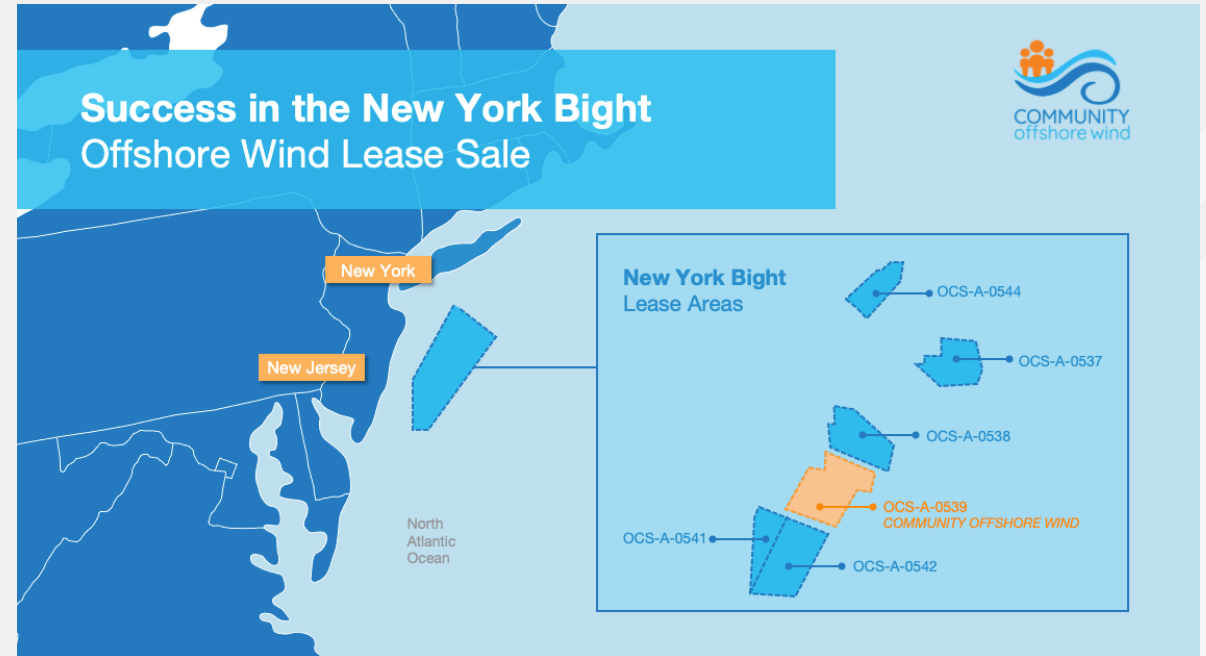
- Large scale onshore solar and wind through National Grid Renewables
- Solar & battery projects on Long Island with NextEra

Community Offshore Wind:

- 3GW capacity seabed lease - located between New York/New Jersey
- Joint venture with RWE, bringing unparalleled expertise in offshore wind, the local transmission system, and siting major infrastructure projects in the northeast US

NY Transco JV:

- Proposed by our JV NY Transco to add 3 to 6 GW of transmission capacity between Long Island and the main NY system.



Pursuing a Hydrogen Hub





We envision buildings powered by offshore wind and solar, and heated by green hydrogen. Energy stored by batteries and transported through modernized transmission networks.



This new future creates optionality to develop the clean energy hubs of the future for the communities we serve



- We recognize the impact infrastructure development has on communities and are putting them first in the energy transition

- Our projects grow local economies, create jobs, contribute tax revenue, and lift up communities in the northeast US



- We are engaging with the people that live in the towns where we will be making clean energy investments and we want to improve their neighborhoods

An integrated approach for a clean energy future

NG Ventures is complementary to the regulated business

Long Island is uniquely positioned to become an integrated clean energy hub

We are innovating right now to accelerate the transition to clean energy





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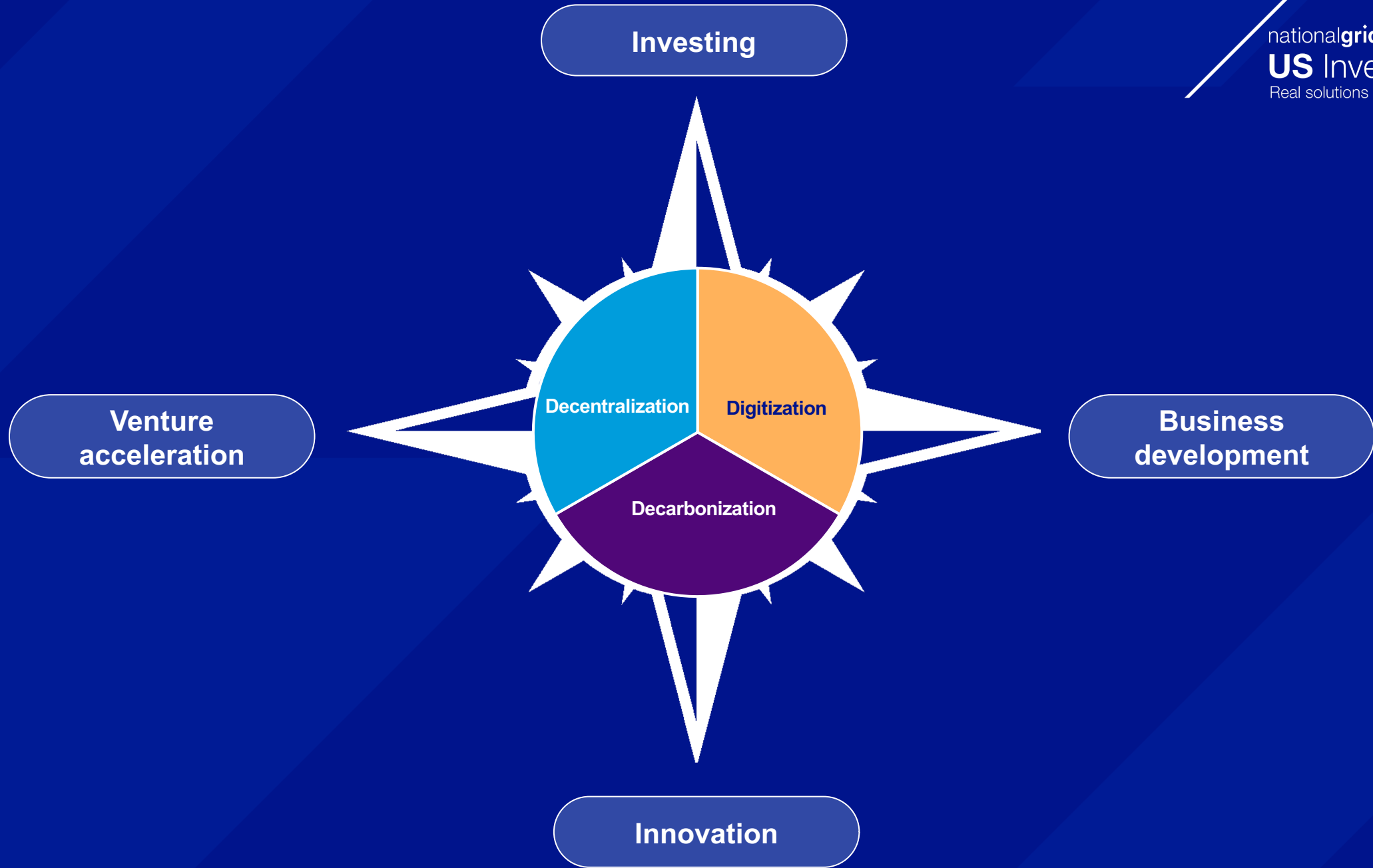
Lisa Lambert

President, National Grid Partners



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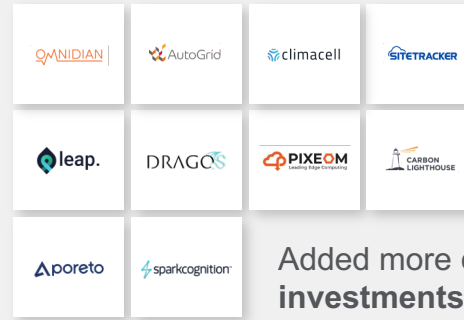
nationalgrid partners



Energy Innovation Strategy

Lisa M Lambert
January 21, 2018

External launch of
NGP and announcement
of first 5 investments



Added more **disruptive investments** to our portfolio

Created **Innovation Center of Excellence (CoE)** forming new **Horizon 3 businesses**



2018

National Grid
strategic directive
for innovation drives
formation of NGP



Hundreds of 1:1
meetings, **Town Halls, Round Tables, Listening Tours**



2019

Launched **NextGrid Alliance (NGA)** and commenced events

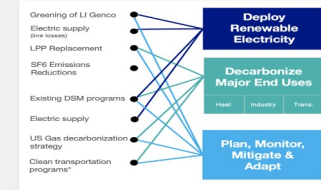


Delivered strong financial returns – **first two exits**





NGP Advisory board launched and expanded scope of ToR to include all functions in strategic impact



Innovation CoE launched first disruptive innovation project and BU rollout

Decarb partnership and investment strategy rollout

2020

2021

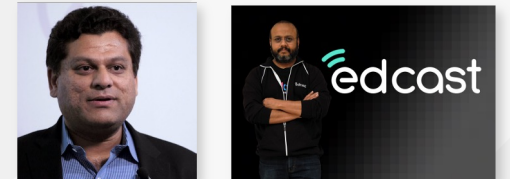
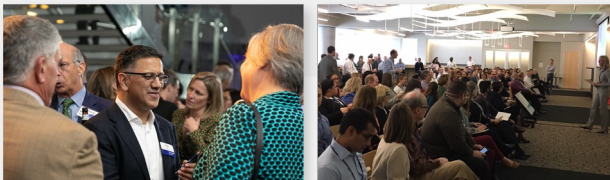
2022

Scaled up Venture Acceleration function (Venture Fellows, Power Tuesdays, Sprint Teams, US Core Pilot, Advisory Boards, Secondments)



Continue with strong financial returns AND announced \$150m in new funds – **two additional exits**

Two more exits



Demonstrated track record of success

\$345m

deployed

100+

years' investing
experience

125+

years' utility
experience

44

investments

6

successful exits

50%

lead investor

75%

strategic engagements

38%

gross IRR

20%

net IRR

85

NG Alliance
companies



TS Conductor involves a carbon composite core encapsulated by an aluminum layer providing improved efficiency in transmission and distribution through reduced line losses.



Viridi Parente

200+

Green machine
units currently
in use

1MWh

Of back up
power through
battery storage

50%

Quieter than diesel
alternatives

Viridi Parente deploys safe lithium-ion technology into applications that have been historically dominated by fossil fuel energy sources.



Exodigo is a revolutionary, non-intrusive subsurface imaging platform, providing a digital geolocated 3D map of buried assets. It combines multi-sensor fusion and artificial intelligence to dramatically improve accuracy and time to map, which reduces damages and costs associated with unnecessary excavation.

Mega trends



Decarbonization



Decentralization



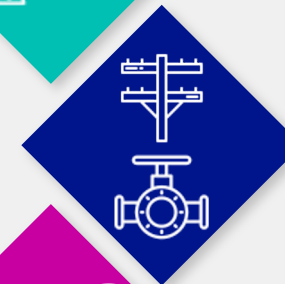
Digitization



Investment categories



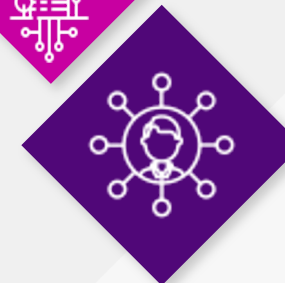
Customer-focused solutions



Modern assets & operations



Utility of the future



Smart enterprise



Portfolio



copper





Urbint

40%

of parent customers
use multiple
solutions

70

unique product
customers

30%+

reduction in
damages

Urbint uses AI to predict safety threats, enabling companies to optimally deploy resources to mitigate risk and stop safety incidents before they happen.



LineVision is securing the future of the grid by enabling utilities to improve transmission line capacity, resilience, and safety through advanced non-contact sensors and analytics.

Financial performance

For early exits
Cash-on-cash ~2x
IRR 25% -150%


Acquired by

\$480mm


Acquired by

\$150mm


Acquired by

\$500mm


IPO
\$1.6b


Acquired by

\$325M


Details TBD

Up-rounds


Co-investors:
Blackrock, EIP
15x
Step-up since
initial investment


Co-investors:
March Capital
10x
Step-up since
initial investment


Co-investors:
IA Capital Group
10x
Step-up since
initial investment

Unicorns
(>\$1bn valuation)

Expected breakout
investments

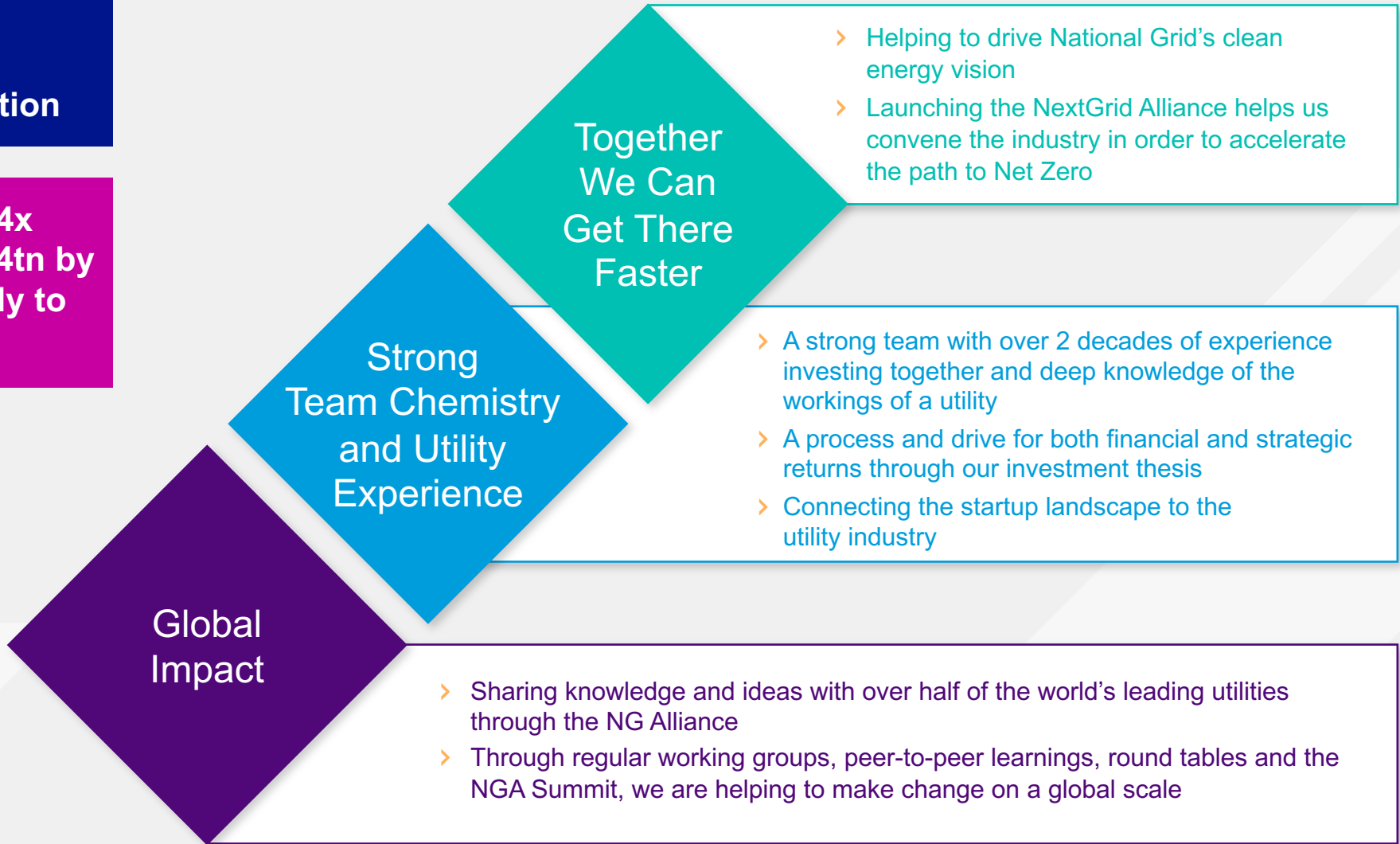
Expected
above-market performers

Faster, together

Decarbonization will require transformative leaps in clean energy investment and innovation

The IEA estimates we need to 4x current investment spend to \$4tn by 2030 and continue that annually to achieve net zero by 2050



*International Energy Agency Net Zero 2050 Report (2021).



Thank you

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Q&A



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Closing remarks



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