



Company Planning and GHG Strategy

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DTE

2019 INTEGRATED RESOURCE PLAN SUMMARY

Clean, Reliable Solutions to
Power Michigan's Future

By the Numbers

DTE Employee Count:

10,000+

Operating Revenue:

\$14.2 billion in 2018

Electric Customer Count:

2.2 million

Michigan's largest electric energy company

Electric Service Territory:

7,600 square miles

Power generated by renewable energy,
natural gas, nuclear, coal, oil and hydro

Gas Customer Count:

1.3 million

Among the nation's largest natural gas companies

Gas Service Territory:

20,300 square miles

Natural gas storage, transport and distribution

Gas Storage & Pipelines:

9.3 billion

DTE Gas Storage and Pipelines owns more than 1,600 miles
of pipelines with a capacity of 9.3 billion cubic feet per day

Power & Industrial:

50 projects

From industrial energy services to renewable energy
projects and environmental controls, we operate more than
50 power and industrial projects nationwide

2017
TARGETS

Accelerating our carbon
reduction commitment a decade

2019
TARGETS

2023 = 30%



2023 = 32%

2030 = 45%



2030 = 50%

2040 = 75%



2040 = 80%

2050 = 80%



2050 = >80%

This plan will show that we
can achieve...

A 50 percent reduction in
carbon emissions by 2030,
and an 80 percent
reduction in carbon
emissions by 2040 - ten
years earlier than we
originally forecast.



DTE

Pragmatic, Proactive, Purposeful and Policy-Driven Approach to Planning that is led from the Top

“Not only is our 80% carbon reduction goal achievable – it is achievable in a way that keeps Michigan’s power affordable and reliable. There doesn’t have to be a choice between the health of our environment or the health of our economy; we can achieve both.”

Gerry Anderson, chairman and CEO, DTE Energy



Timeline of Drivers that Have Influenced Our Approach

2008	MI Energy Legislation: 10% RPS & EE Standards
2009	Waxman-Markey climate bill passes House
2010	Senate Kerry-Lieberman climate bill falls apart
2012	1 st Climate Shareholder Resolution on GHG Targets
2013	City of Detroit Files for Bankruptcy
2014	EPA Proposes Clean Power Plan
2015	EPA Finalizes Clean Power Plan
Feb. 2016	Supreme Court Stays Clean Power Plan
April 2016	Paris Agreement signed

Timeline of Drivers that Have Influenced Our Approach

Nov. 2016	Trump Elected President
Dec. 2016	Michigan Energy Legislation establishes 15% RPS and 35% Clean Energy (RE & EE) by 2025
May 2017	Shareholder Resolution on a 2-Degree Scenario Report defeated (45% vote yes) DTE >80% by 2050 Carbon Goal announced
March 2018	Two Shareholder Resolutions withdrawn: <ul style="list-style-type: none">•1. Report on 2-Degree Strategy;•2. Report on methane emission reduction targets
April 2018	Certificate of Necessity (CON) for BWEC Natural Gas Plant approved
May 2018	DTE/CMS Agreement to 50% Clean Energy by 2030 to avoid ballot initiative
March 2019	IRP Filing – DTE Accelerates Carbon Goal to 80% by 2040

DTE's Journey to 80 (www.journeyto80.com)

DTE [Home](#) [Our Vision](#) [Reducing Emissions](#)

OUR JOURNEY to 80

Climate change is one of the defining public policy issues of our era. **Our plan to reduce carbon and methane emissions by more than 80 percent** is among the most aggressive and was among the first to be announced in the energy industry.

EXPLORE THE ROAD MAP ↓

A roadmap of scenarios born out of a virtuous confluence of events:

- Falling prices for renewables
- Competitive natural gas generation
- Aging coal plants
- Energy efficiency and demand response opportunities
- Partnering with major customers on sustainability goal solutions

The next 5 years...



Retire River Rouge, Trenton Channel and St. Clair Power Plants in 2022



Blue Water Energy Center Comes online in 2022



More than doubling renewables by 2024



Expanding voluntary renewable programs for homes and businesses



Increase energy efficiency to 1.75%

Five Years after that...



Retire Belle River Power Plant by 2030



Increase renewables to at least 25%



Continue to market and add voluntary renewables based on customer demand



Continue 1.75% energy efficiency and review biannually

The Future...



Retire Monroe Power Plant by 2040



Increase renewables, energy efficiency and demand response consistent with carbon reduction goals

There are multiple pathways to meet carbon goals and generation needs in 2030 and beyond; we will remain flexible and present potential future options in our next IRP.

DTE

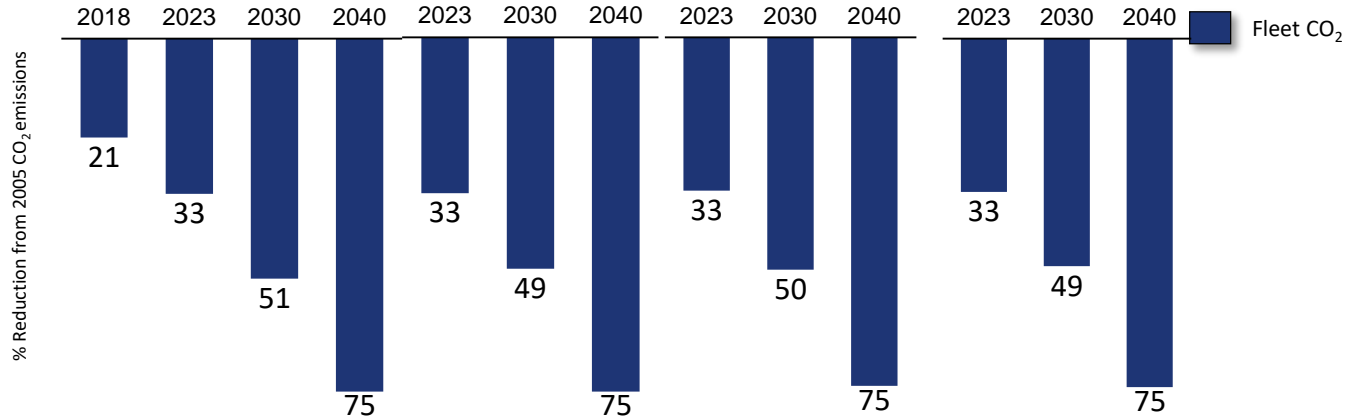
Next steps in our Journey to 80

- Responding to intervenor questions on the IRP
- Accounting for the carbon intensity of electricity delivered to our customers
- Adjust...
- File our next IRP

Additional Information

- Methods for accounting for GHG emissions delivered to our customers as presented in DTE's March 2019 IRP

Direct emissions, Fleet accounting shown, not impact of purchases and sales for Proposed Courses of Action (PCAs)



PCA Pathway A

- 1390 MW Voluntary RE
- 50 MW CVR/VVO

PCA Pathway B

- 1390 MW Voluntary RE
- 2030 CCGT

PCA Pathway C

- 465 MW Voluntary RE
- Demand Response
- 50 MW CVR/VVO
- 2% EWR

PCA Pathway D

- 465 MW Voluntary RE
- 2030 CCGT

All PCA pathways modeled meet DTE's CO₂ reduction goals. Annual Net Short Method of accounting shown

