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Net-Zero Emissions Goals and the National OCS Program

Scientific consensus and confidence suggests limiting global warming to 1.5°C to avoid the most severe climate impacts.

- Reaching net-zero emissions means that the economy emits no more GHGs into the atmosphere than are permanently removed and stored each year.
- Numerous pathways to achieve domestic net-zero emissions by 2050 exist; all pathways highlight the need for, and policies to, improve energy efficiency, the decarbonization of electricity, and the transition to clean fuels.
- Pathway assumptions vary and limit a quantitative OCS leasing analysis in a Net-Zero future.
  - Along many pathways, natural gas and oil demand remains to varying degrees.
  - Technology advances, policies, and other drivers will significantly change the composition of energy markets and alter the way in which OCS oil could be substituted for in the future.

How are Net-Zero Emissions Goals considered in the Proposed Program?

- Highlight the possibility of changing energy demand
- Hypothetical energy market shifts lead to different economic conclusions

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CHAPTER 1: Discusses evolving energy needs and possible net-zero emissions pathways from The White House, Princeton University, and the International Energy Agency

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CHAPTER 5: Calculates the net benefits associated with OCS program and the energy substitutes that may result in the absence of a program. Includes a hypothetical analysis of how the net benefits may change as the U.S. advances toward a net-zero emissions economy.

CHAPTER 6: Considers how net-zero emissions policies may impact national energy markets and highlights regional or state emissions goals.

CHAPTER 8: Recognizes how net-zero emissions may impact the evaluation of equitable sharing of developmental benefits and environmental risks.

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Net-Zero Emissions Goals and Substitution Analysis

What is BOEM's Substitution Analysis?

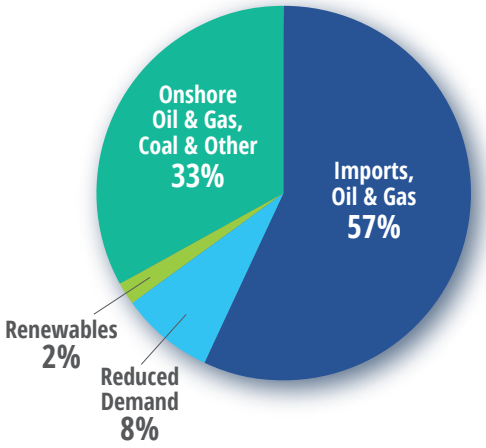
To develop the National OCS Program, BOEM considers OCS oil and gas activities impacts from potential production from lease sales. Because decisions on the National OCS Program will not on their own greatly impact U.S. oil and gas consumption, BOEM considers how alternative energy sources would substitute for any forgone OCS production.

Substitutions under Current Laws and Policies:

Without new production:

- Less supply but little change in energy demand
- Prices are higher (than would be with new leasing)
- Gap between supply/demand met by other energy sources (substitutes) like foreign-sourced oil by supertanker, more domestic onshore oil & gas production, more biofuel and coal production.

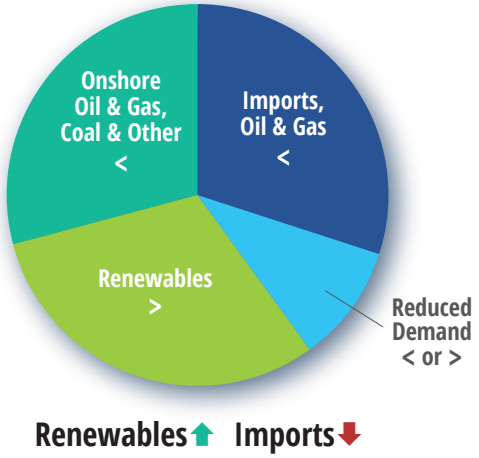
Energy Market Substitutions Assuming Current Laws and Policies



Substitutions Patterns Shift under Net-Zero Pathways:

- Meeting U.S. climate goals requires significant changes to the national and worldwide economies and consumption patterns.
- The specific components of these substitutions could vary dramatically based on the future energy scenario and pathways, leading to different economic analyses' results.
- Pie chart below shows how these substitutions could differ in a future net-zero emissions world.

Hypothetical Energy Market Substitutions Assuming Net-Zero Future



BOEM welcomes comment and feedback on the methodology and assumptions for its qualitative analysis and ways to refine its existing analysis moving forward, both qualitatively and quantitatively.