

# 5 Key Points about the Economics of GHG Cap-and- Trade Legislation



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# What's this got to do with Sustainability, anyway?

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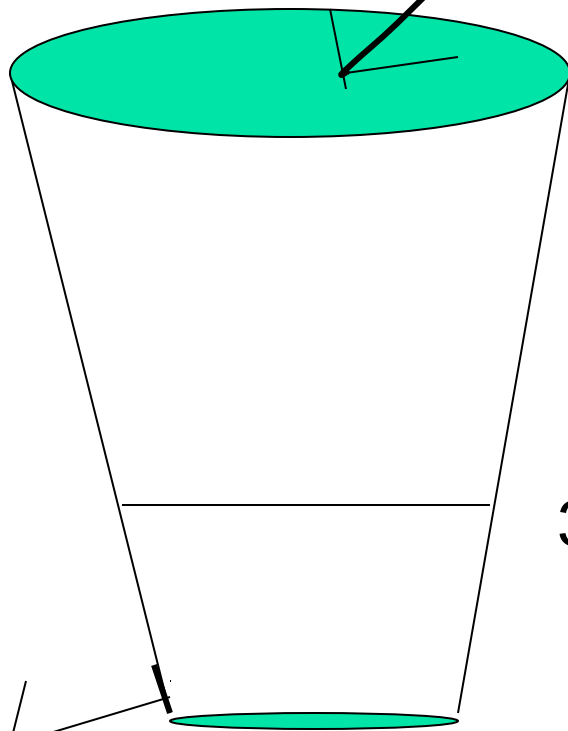
- The overwhelming scientific consensus is that our current energy system will bring about huge negative consequences
  - The sooner we begin changing, the lower the costs and the lower the negative consequences
- ... and thus addressing climate change sooner makes our development more sustainable

Current net increase -  
1.5 - 2 ppm /year

GHG emissions

380 ppm

GHGs leaving atmosphere



# It's the Long Run That Matters

Energy systems  
take a long time  
to change





# #1 It makes economic sense to reduce GHGs

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- We should make policy based on the probability distribution of peer-reviewed climate science
  - High probability of human-induced climate change and significant expected damages
- Economic research and modeling generally agrees that reducing GHGs is economically efficient
  - There is variation in research and opinion how much or how quickly to reduce



## #2 Cap-and-Trade Does Two Distinct Things

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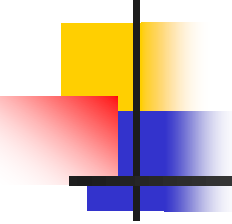
1. raises the price of energy produced from fossil fuels
2. makes decisions about how the revenue created by the C&T system is used



## #3 C&T creates broad and efficient incentives

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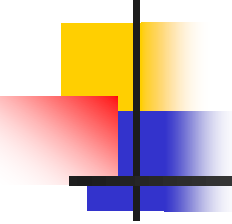
- Using market signals as part of our response to climate change risk is good public policy
- ACESA will create this market signal in the American energy system



## **#3a Predictions about the size of the economic signal (the carbon price) are uncertain – but ACESA does have some safeguards**

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- ACESA will improve incentives for low- and no-carbon energy sources, carbon capture and sequestration, and other new technologies – it is very difficult to predict how much and how fast these sources will increase.
- ACESA and other public policies, plus individual and business reactions, will determine how much can be reduced from innovation and end-user conservation



## **#3a Predictions about the size of the economic signal (the carbon price) are uncertain – but ACESA does have some safeguards**

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- Offset allowances from agriculture and forestry, and from international sources, will keep prices lower than they would otherwise be
- The allowance reserve also provides protection against unexpectedly high prices in the early years of a C&T program



## #3b Predictions about the macroeconomic effect of C&T are not scary

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- As with any long-term forecast, highly uncertain
- Overall costs generally predicted to be positive but small relative to predicted economic growth
- And are certainly small relative to large economic drivers like the predicted growth in health care costs, variations in defense, etc.



# #4 “Who gets the money” is a public expenditure question

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How to allocate the (very roughly) \$100 billion / year in allowance value

- under ACESA, much of the money goes to electricity consumers
- Ohio stands to benefit from allowances devoted to compensating industrial emitters
- There are a myriad of other uses – deficit reduction, funding energy research and conservation, funding adaptation, and many more



## #5 Trade and Competitiveness Concerns Exist, but Are Neither Broad nor Large

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- Significant effects concentrated in iron and steel, aluminum, cement, and paper.
- Overseas shift less than 1% of output
- Employment declines lower than output shifts

=> Problem is likely to be in very narrow industrial sectors, not the broader economy



# Protecting Vulnerable Industries and Consumers – options for federal legislation

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- Use allowances to keep rates down
- Give allowances to vulnerable industries
- Use auction revenue to
  - transfer income to vulnerable consumers
    - Tax code
    - Energy assistance
  - Support R&D in vulnerable industries
- Use border tariffs to protect domestic industry



# Most Important Implication for Ohio's Economic Well-being

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- GHG limitations implemented (at least partially) through price signals are going to be a part of or future
- Politically we have a stake in
  - The size and timing of the price signal
  - The way that revenue is used
- Our economic future will be better if
  - we incorporate the effects of a GHG price in our public and private decisions
  - Anticipate the opportunities presented by the ACESA (or whatever ends up passing)



# Is the ACESA the Economically Optimal Policy?

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- **No** – it is a bill that almost no economist could love without reservation
  - The big positive is that it *does* put a broadly applicable price on the great majority of GHG emissions
  - It also represents a necessary step in making progress in international efforts to coordinate GHG reductions and engage developing countries



# Is the ACESA the Economically Optimal Policy?

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## Downsides

- It makes political decisions about allowance value use that could be better
- It contains hundreds of pages of additional provisions that regulate the energy system in inflexible and inefficient ways
- The system would be better served by greater price certainty in the early years



# Is the ACESA the Economically Optimal Policy?

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- My own judgment is that the benefit of getting a reasonable GHG price into the US economy ASAP makes passage a significantly better public policy option than hoping for a better bill in the future
- And a much better option than hoping for no bill in the future

