



NextGrid Illinois

Welcome to

Working Group 6

Session 4: Pathways to Decarbonization

Mary Gade, Facilitator

July 31, 2018

Agenda

Time	Agenda Item	Presenter
1:00 - 1:10 (10 minutes)	Welcome and Introductions	WG-6 Leader Mary Gade
1:10 - 1:40 (30 minutes)	Presentation on Decarbonization of the Electricity Sector	David Littell, Regulatory Assistance Project
1:40 - 3:10 (90 minutes)	Breakouts, Report Back and Discussion	Mark Templeton, University of Chicago Law School
3:10 - 3:20 (10 minutes)	Discussion of Draft Chapter/Outline	WG-6 Leader Mary Gade
3:20 - 3:50 (30 minutes)	Public Comment	WG-6 Leader Mary Gade
3:50 - 4:00 (10 minutes)	Next Steps	WG-6 Leader Mary Gade

WG-6 Value of Carbon Survey Results

9. If Illinois were to put a price on carbon and other greenhouse gases through a tax or a cap-and-trade system, what information would Illinois policymakers need to have and what factors would they need to take into consideration before developing and implementing such a system?

Information Needed

Data

Social and Economic Costs/Benefits

Other States

Regulatory Structure Issues

Economic Issues

Environmental Issues

Spending the Revenue

9. ... what information would be needed and what factors would need to be taken into consideration? (cont.)

Information Needed:

Data

- “Optimal” level of emissions
- IPA’s definition of “environmental justice communities”
- Current availability of emissions inventory data and monitoring systems

Social and Economic Costs/Benefits

- Social, economic, public health, and environmental costs/benefits of state carbon price?
- Including damage from emissions and costs of abatement
- Target levels of reductions

Other States

- Lessons from California and RGGI
- Jurisdiction on emissions of generating assets in other states
- Similar regulatory regimes in other regions/states

9. ... what information would be needed and what factors would need to be taken into consideration? (cont., 2)

Regulatory Structure Issues:

- Sufficient tax level/price to drive reductions/investments
- What activities/geographic area would a cap/tax cover?
 - Integration into PJM/MISO energy markets
- Preventing leakage
- Advantages of tax vs. cap and trade (certainty?)
- Tight cap vs. lax cap
- Social Cost of Carbon
 - Cost established in FEJA
 - Prices in RGGI and CA low relative to SCC
 - Market system vs. estimating cost
- How will the program interact with other states?
 - State boundaries
 - Out of state generation
 - Better to join existing program than start from scratch?
- Who implements/administers the program?
- Who collects/distributes revenue, and to where?

9. ... what information would be needed and what factors would need to be taken into consideration? (cont., 3)

Economic Issues:

- What is the price?
 - How is it determined?
 - How to ensure desired reductions?
- Which customer groups will pay and how much?
 - Effective rate on various entities
- Impact on IL economy/competitiveness generally
- Impact on energy intensive industries
- Impact on IL coal
- What is the effective tax rate on various entities?
- How will public sector entities bear tax?
- How will disadvantaged populations bear tax?
 - Equity/environmental justice
- Who gets revenue?

9. ... what information would be needed and what factors would need to be taken into consideration? (cont., 4)

Environmental Issues:

- Impact on existing zero emissions standard and RPS
- Impact of specific sectors (transportation) on carbon emissions
- Encourage zero-carbon generation instead of tax
- Electrification of transportation, heating, industry, etc. needed for deep decarbonization
- Legacy issues associated with coal

Spending the Revenue:

- Refunds to customers (to offset higher costs)
- Investments in energy efficiency/clean energy technology
- Targeting funds in environmental justice communities
- General revenue

10. If there are pollution issues that need to be addressed in addition to carbon and other greenhouse gases, what are those pollution issues and how should they be addressed?

Types of Pollution:

- Water and solid wastes
- Hazardous air pollutants (mercury)
- Criteria air pollutants (particulates, ozone, SO₂, NO_x)
- Lifecycle impacts of renewables/storage
- Embedded carbon brought into IL
- Environmental externalities
- Air pollution from trucks in low-income neighborhoods

Mechanisms to Address:

- Market programs
- Utilities/ISOs prioritizing clean generation over dirty
- Recycling/disposal policies for generation/storage
- Phase out diesel generation in favor of backup storage
- Focus on emissions that have measurable health impacts with CO₂ reductions as side benefit

Breakout Sessions

Breakout Questions

1. Given the considerations required in establishing a system for pricing carbon emissions, what are the benefits Illinois might expect from such an approach?
2. What are the potential challenges to Illinois adopting such an approach?
3. How can those challenges be addressed?

- 1. Given the considerations required in establishing a system for pricing carbon emissions, what are the benefits Illinois might expect from such an approach?**

Report Back

Question 1

2. What are the potential challenges to Illinois adopting such an approach?

Report Back

Question 2

3. How can these challenges be addressed?

Report Back

Question 3

Discussion of Draft Chapter/Outline

Timetable

- 1) Draft circulated to participants
- 2) Comments due from participants
- 3) Review revised draft
- 4) Draft chapter submitted by WG-6 Leader

Public Comment

Next Steps



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