

# CARBON PRICING AND TRANSPORTATION

HIGHWAY REVENUES SUBJECT TO COST  
RESPONSIBILITY

**Joint Committee on Transportation**

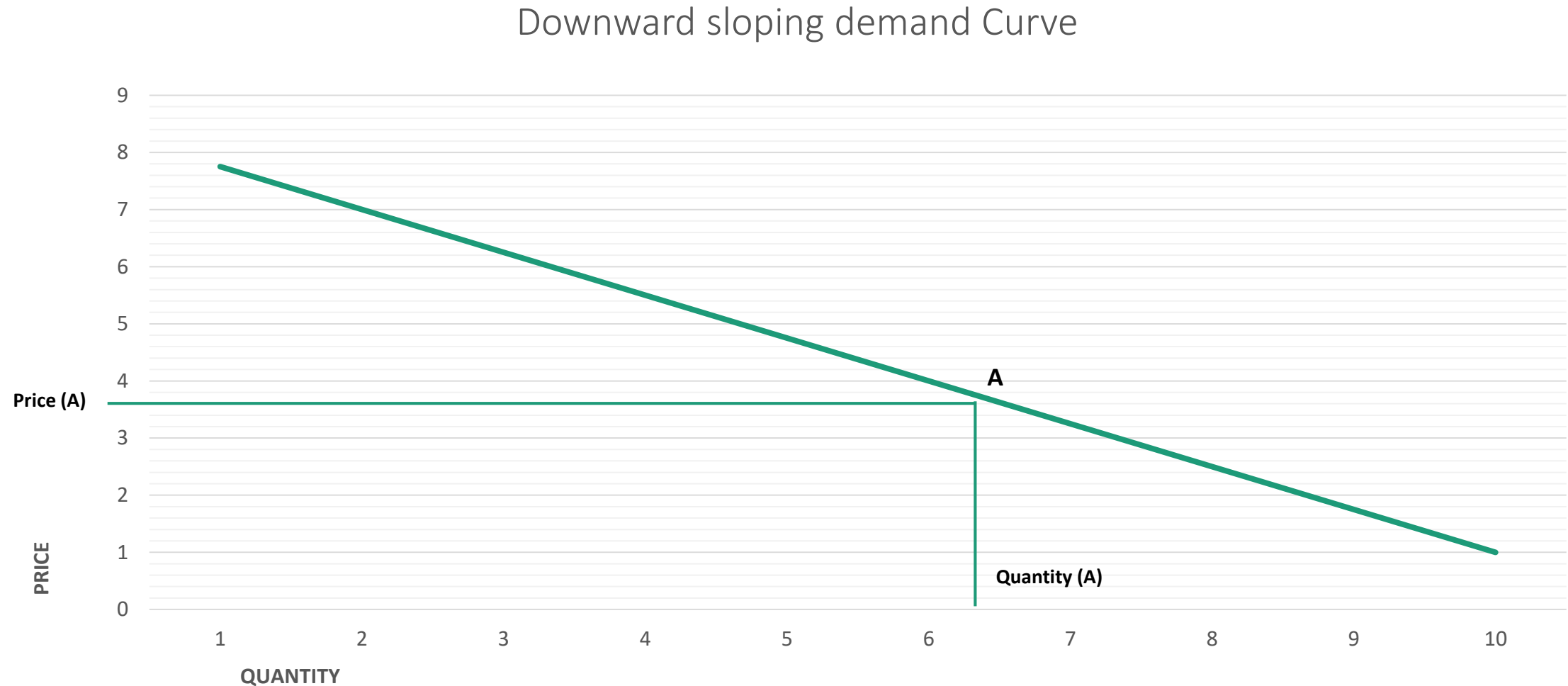
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FEB-25-2019

# HIGHWAY COST ALLOCATION MODEL

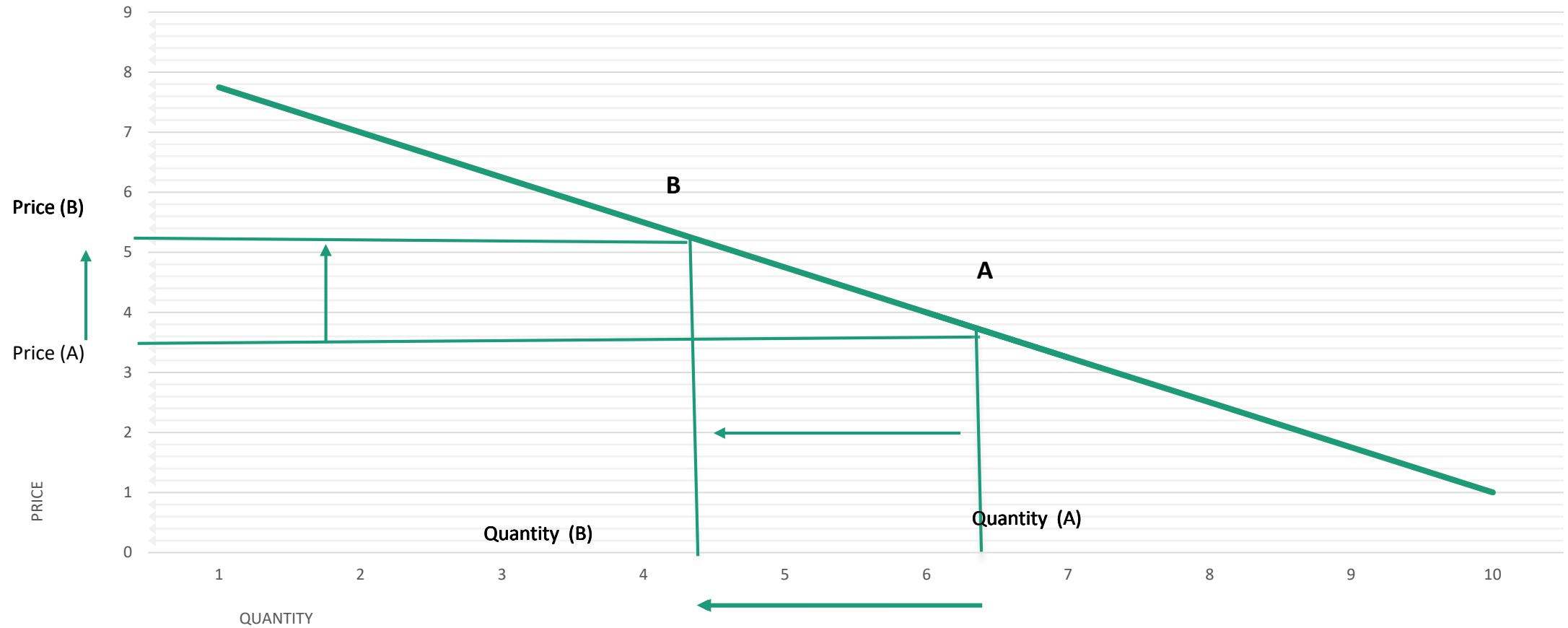
- Model is delivered to LRO at the beginning of the session
- Used to calibrate costs and revenue
- Transportation packages and other revenue increases
- When C&I came up, the question was:
  - **Does it effect highway revenue and why?**
  - How does it interact with highway revenue and Cost responsibility?
- The way we understand it
  - The confluence of two systems
    - Pricing and the traditional Cap & Trade

# Emissions at Point A, price(A) and Quantity(A)



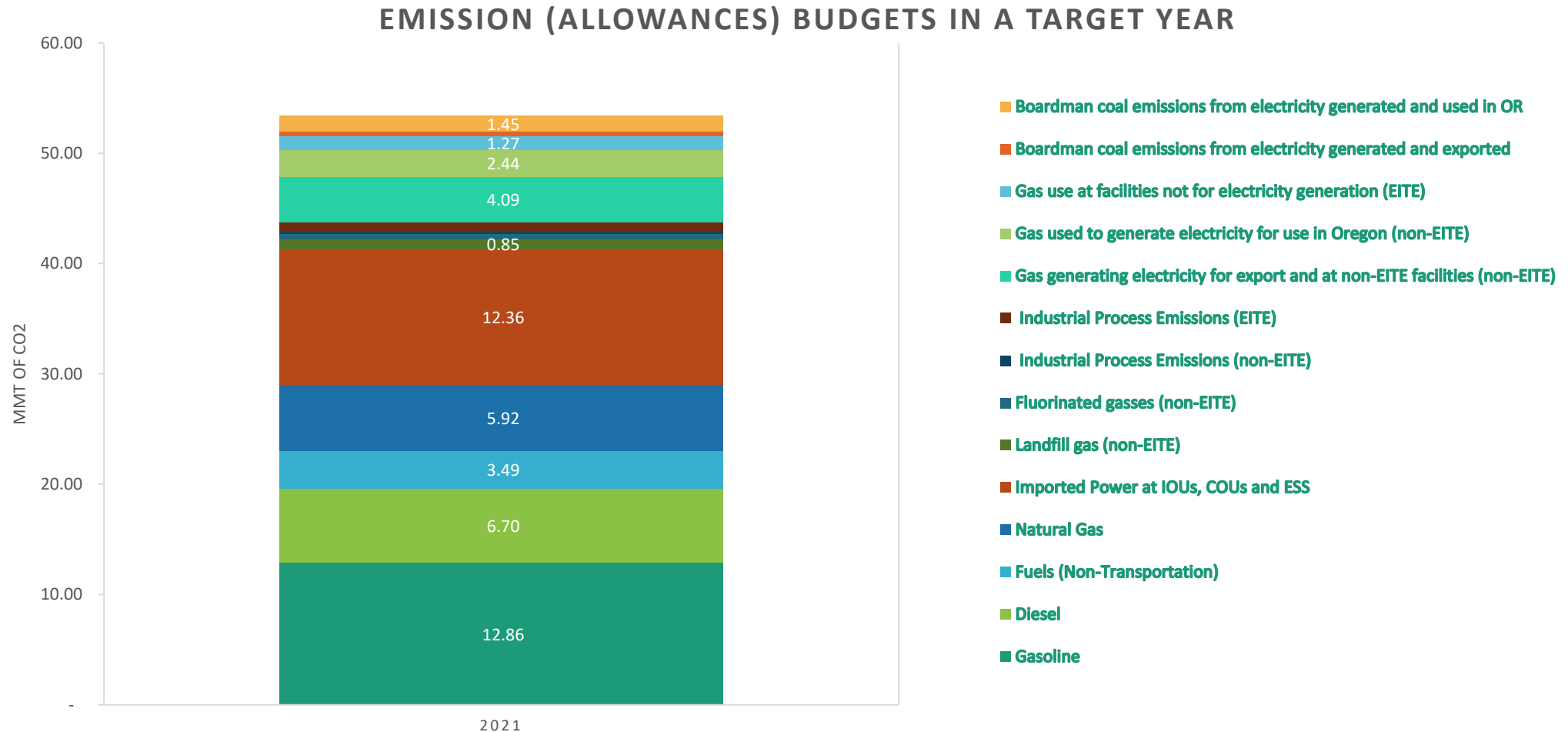
# Quantity will go back (inversely related) to Q2

## Pricing System effect



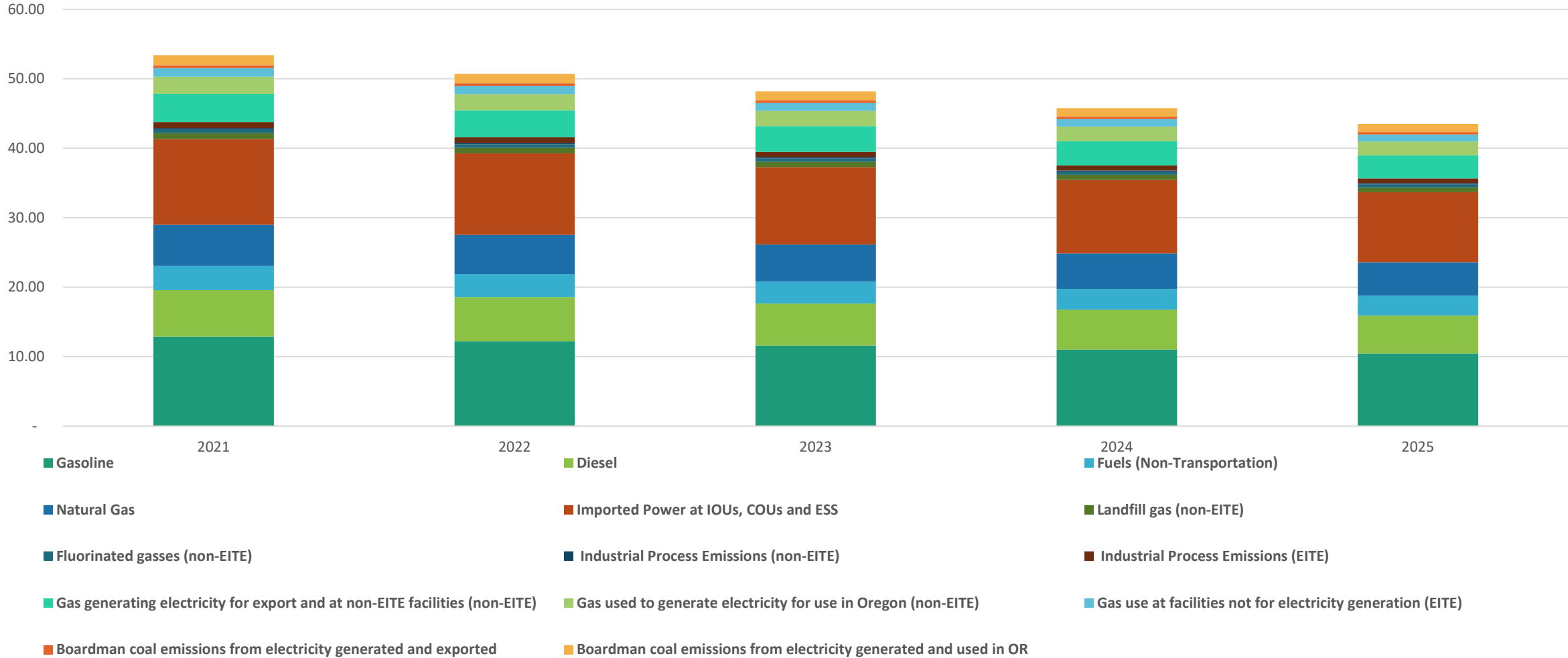
# Oregon Total Emissions by category

(generic concept, not current legislation)



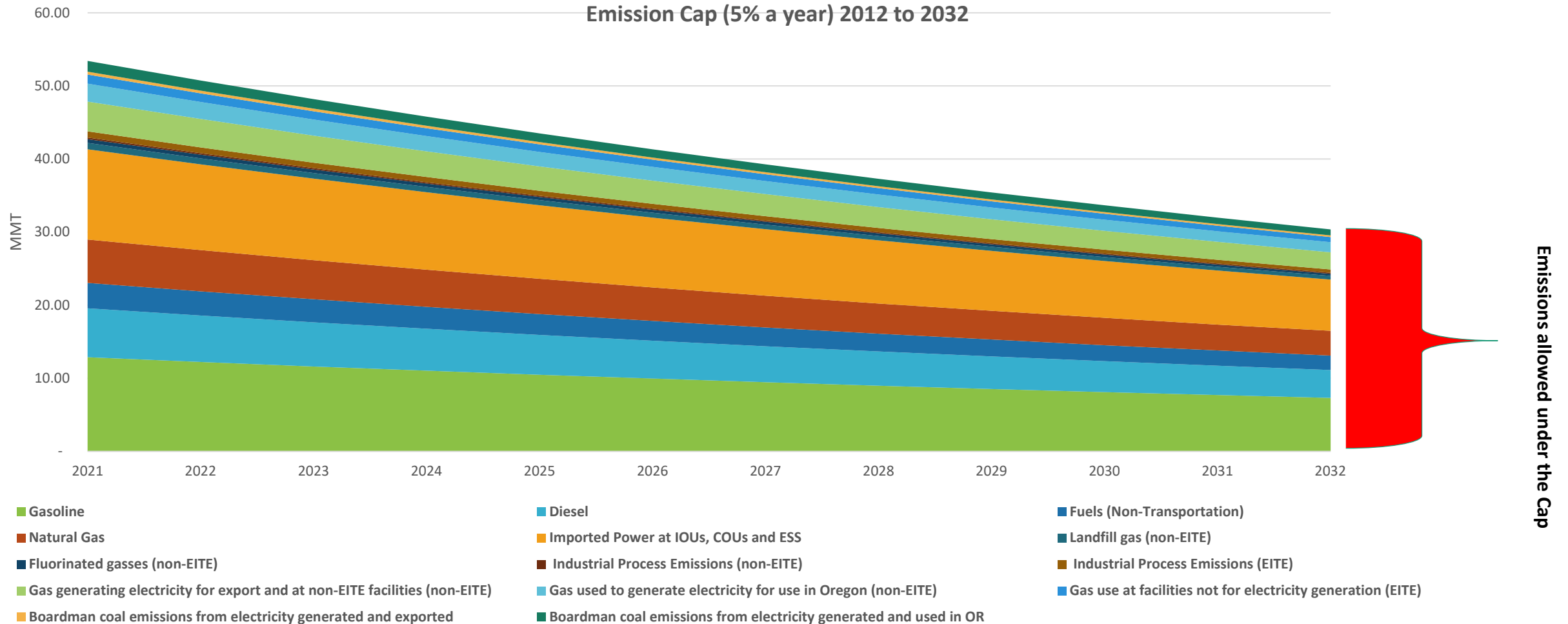
# Total allowances are the sum of the categories

Reduce Emission Budget (allowances) at 5% a year for 5 years  
Total budget is the sum of category budgets



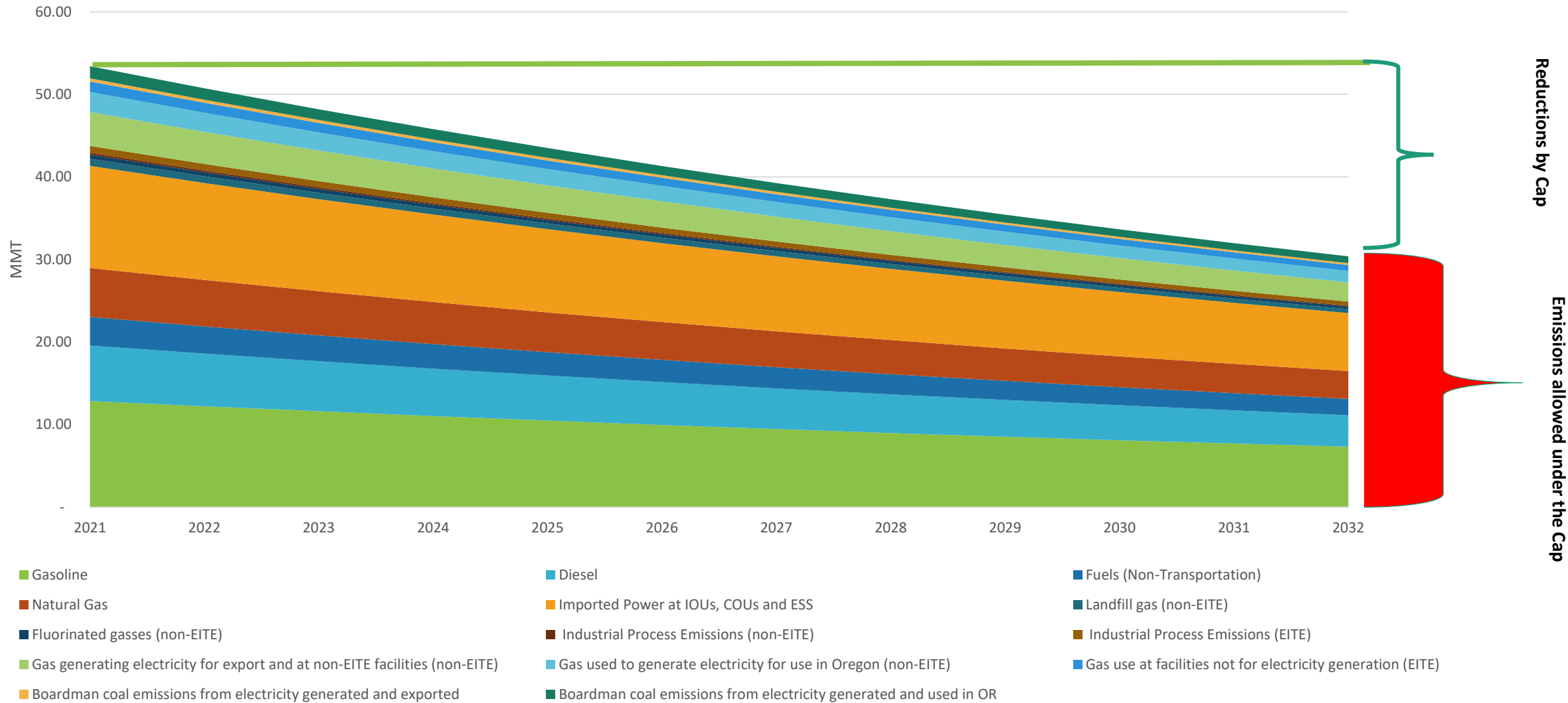
# Emissions Allowed Under the Cap 2021 to 2032

(Traditional System of C&T, would allocate Free Allowances to all)



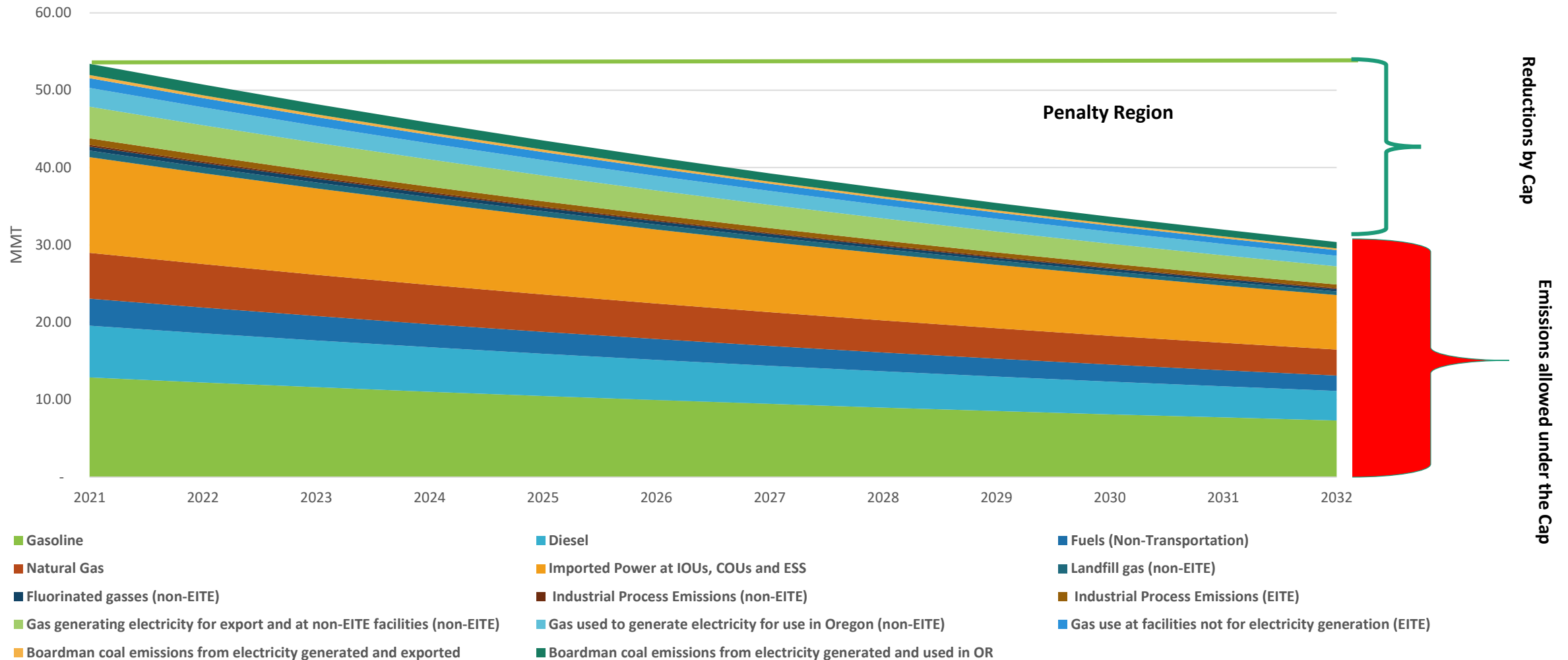
# Reductions Expected By Imposing the Cap

if all perfectly comply






# Secondary Market in Trading allowances emissions stay under the cap. (or pay penalties)



# Example of how allowance Trading works


<b>Example 1</b>		Budget	end of	Need
	Start	allowed	period1	Trade
Firm A	9	8	10	2
Firm B	9	8	7	-1
Firm C	9	8	7	-1
<b>Total Cap</b>	27	24	24	0

Compliance under the Cap. No penalty



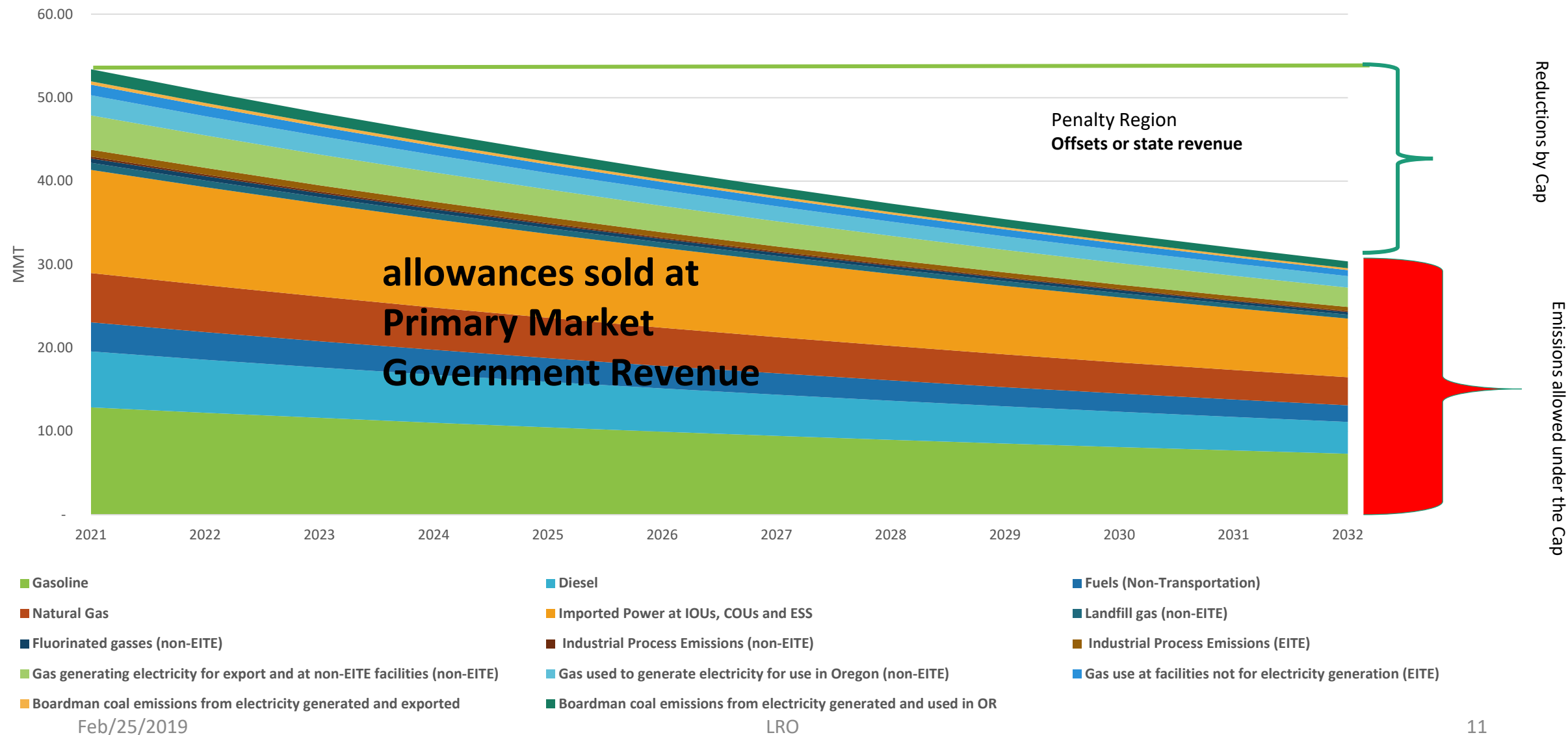
<b>Example 2</b>		Budget	End of	Need
	Start	allowed	period1	Trade
Firm A	9	8	10	2
Firm B	9	8	7	-1
Firm C	9	8	8	0
<b>Total Cap</b>	27	24	25	1

Above the Cap. penalty

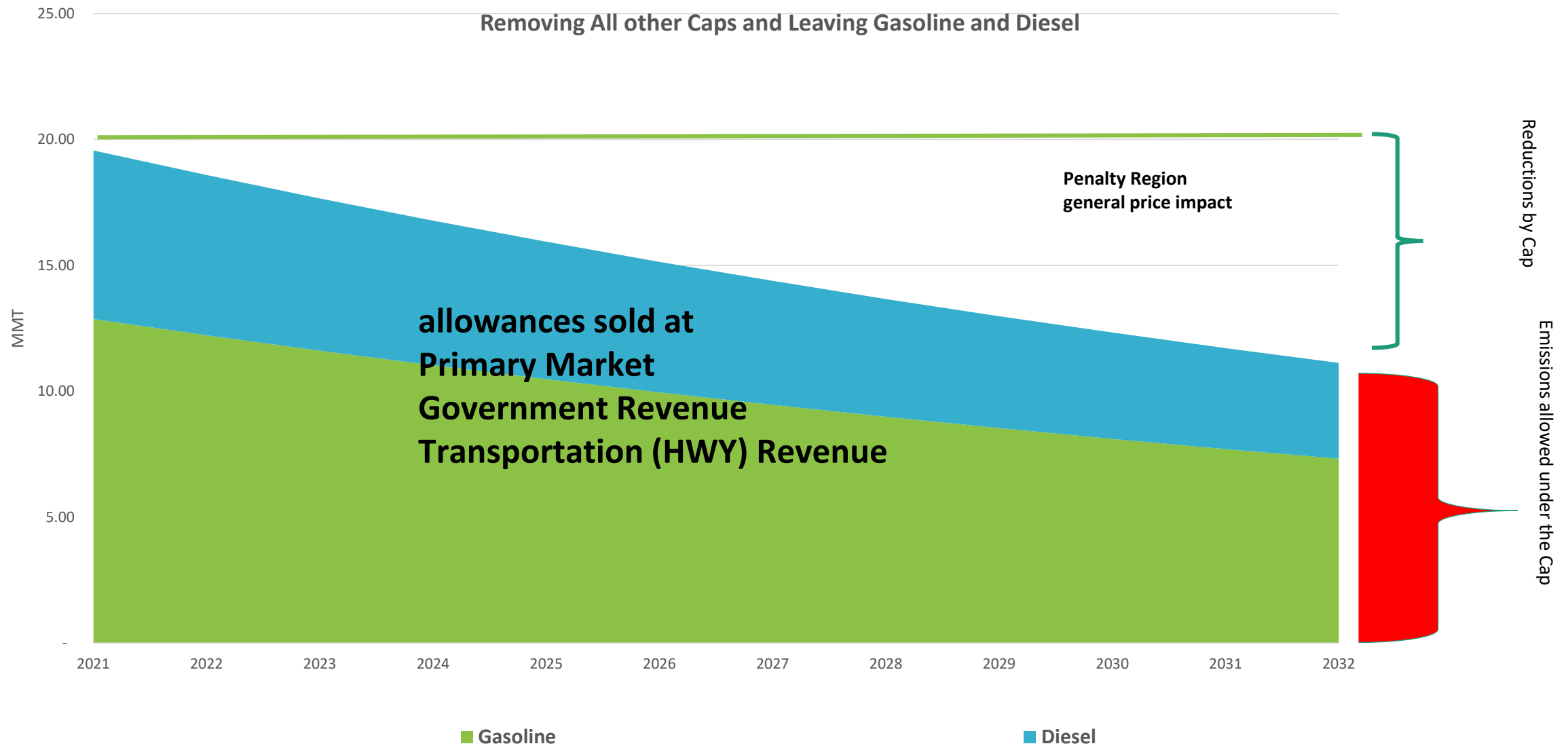


# Introduce Pricing for Allowances Under the Cap

## Primary Market (Government Revenue)



# C&I Revenue For the purpose of Transportation



# TRANSPORTATION REVENUE FROM SELLING C&I ALLOWANCES

- Allowance sold under the Cap by government are assumed to be Highway Fund Revenue
- Revenues from Penalties (above the Cap) are not included
- How would the Cost Responsibility operate for those revenues?
- Traditionally we have a plan to spend (projects of different types, Collection, Engineering, Administration, and other functions)
- We **allocate** the costs of these functions to vehicle classes
- Approximately 2/3 allocated to light vehicles and 1/3 to Heavy
- How much would **each vehicle class** be paying in taxes and fees
- HCAS re-estimates every two years the more refined costs and revenue (64,36 in 2017)
- An equity ratio (rev/cost) is determined (underpay and overpay)
- Adjust tax rates accordingly

# NEED TO ANSWER SOME QUESTIONS

- How much Transportation Revenue is to be generated?
- What is the revenue to be used for?
- What will be the impact on Heavy/Light balance?
- Costs and revenue proportions and ratios
- Can we find out what revenue is coming from which class?
  - Diesel from Heavy vehicle use (NOT ALL DIESEL IS USED ON THE ROAD)
  - Gasoline/use-fuel from Light
- NEED data and methods to treat it?
- We asked our consultants to look at some scenarios?
- answer some of these Questions