# Distributing Allowance Value: Overview

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# What is an allowance?

- Under a cap and trade program, the government:
  - Sets a cap on emissions
  - Issues tradable "allowances" (authorizations to emit; each authorizes one ton of GHGs)
  - Only issue enough allowances in total as what is allowed in total under the cap
  - Ensures overall allowances match overall emissions
- Entities covered by the program
  - Must hold sufficient allowances to match the emissions for which they are responsible
    - Can reduce emissions
    - Can buy or sell allowances
- Limited number of allowances ("scarcity") plus requirement to hold an allowance if you want to emit makes allowances valuable
- Cap and trade
  - ensures cap is met
  - provides flexibility to emitters
  - Creates price on GHGs

# What is Allowance Distribution?

- Decision over how emissions allowances will be *initially* distributed under a cap-and-trade program
- Does ***not*** affect the overall environmental result (the emission reductions achieved by the program)
- Forum for dealing with equity issues in a cap-and-trade system; affects how the program's costs are distributed
    - Can be used to compensate affected firms, workers and consumers, and ease transition to a new program
- Both a challenge, and an opportunity

# What is Allowance Distribution? (cont'd)

- Basic approaches:
  - Some form of free allocation
  - Some form of auction
  - Hybrid (combination of both)
  - Shift from one to another over time
- Regardless of which method is chosen, either free allocation or auction revenue can be used:
  - To mitigate the economic impacts of the program (e.g., by granting allowances or tax breaks to consumers or competitively disadvantaged emitters)
  - To drive innovation (by using allowances or revenues to fund/incentivize RD&D)
  - Other purposes

# What is Allowance Value?

- The economic worth of the allowances
- Can be in the form of allowances themselves, or revenues from the sale of allowances at an auction.

# Issues in Allowance Distribution

- For what purpose?
- What public policy goal do you want to achieve?
- Who do you want to help?
- Over what time period?
- How is the goal accomplished?

# Things to keep in mind

- Distributing allowances is like handing out money – an inherently political task
  - Auctions face the same problem as free allocation, with revenue distribution taking the place of allowance distribution
- Think about ends first, and means second
  - Debate has thus far emphasized means over ends
- Different kinds of "costs"
  - Transition
  - Competitiveness
  - Inequities
  - Other
- To achieve purpose, the questions are:
  - Who/what entity should receive the allowances?
  - Over what time period?
  - Through what mechanism?

# What purpose?

- **Share burdens and benefits equitably**
  - States/affected sectors/workers/communities/low-income consumers/new entrants
- **Address economic impacts of the policy**
  - Consumer/worker/community/industry
  - revenues/GDP
  - Transitional/long-term
- **Improve on effectiveness of policy**
  - Achieve co-benefits
  - Advance specific solutions that may not be adequately incentivized by the carbon price alone
    - Advance technology RD&D
    - Fund mitigation outside or under the cap
  - Ensure smooth-functioning market (including minimizing price spikes, encouraging early allowance price discovery)

# What purpose? (cont'd)

- **Address impacts of climate change**
  - Fund climate adaptation
- **Reduce or eliminate distortions in the economy**
  - E.g., provide for tax cuts on labor, income and capital
- **Contribute to general revenues**
- **Other**

# Midwest GHG Accord Allowance Value

- The MGGRA Advisory Group has draft recommendations on the use of allowance value

- Allowance value should be put toward climate-related purposes, not other purposes.
  - Climate-related purposes include three categories: (1) accelerating transformational investment; (2) mitigating transitional adverse impacts of the program, and (3) addressing harmful impacts due to climate change.

- Proposal to use some allowance value for *Regional Low-Carbon Technology Commercialization Fund*
  - would support a number of MGA energy and climate technology priorities, including advanced biomass conversion technologies and advanced low-carbon transportation technologies such as low-carbon fuels

# Adaptation planning and actions

- **Who:**
  - State government
  - Disaster relief agencies
  - NGOs
  - Long-term planning and development agencies
- **How long:**
  - Long term
- **How:**
  - Auction revenue distribution or allowance allocation, with dispensation to sell allowances in market for revenue
    - E.g., make adaptation allocation/funds contingent on state plans

# Advance climate solutions

- **What:**
  - Any low or zero-emitting technologies
  - Specific climate solutions
    - carbon capture and storage
    - demand-side energy efficiency
    - forestry
    - transportation (vehicle, fuel, VMT)
- **Who:**
  - Anyone
  - Particular kinds of actors (LSEs, ESCOs)
  - State program
- **How long:**
  - Until new solutions take hold in market
- **How:**
  - Allocate/auction for RD&D in general
  - Allocate/auction to particular actors
  - Allocate/auction to state gov't or local communities

- Note: level of specificity; which technologies to incentivize are challenging issues.

# Demand-Side Efficiency

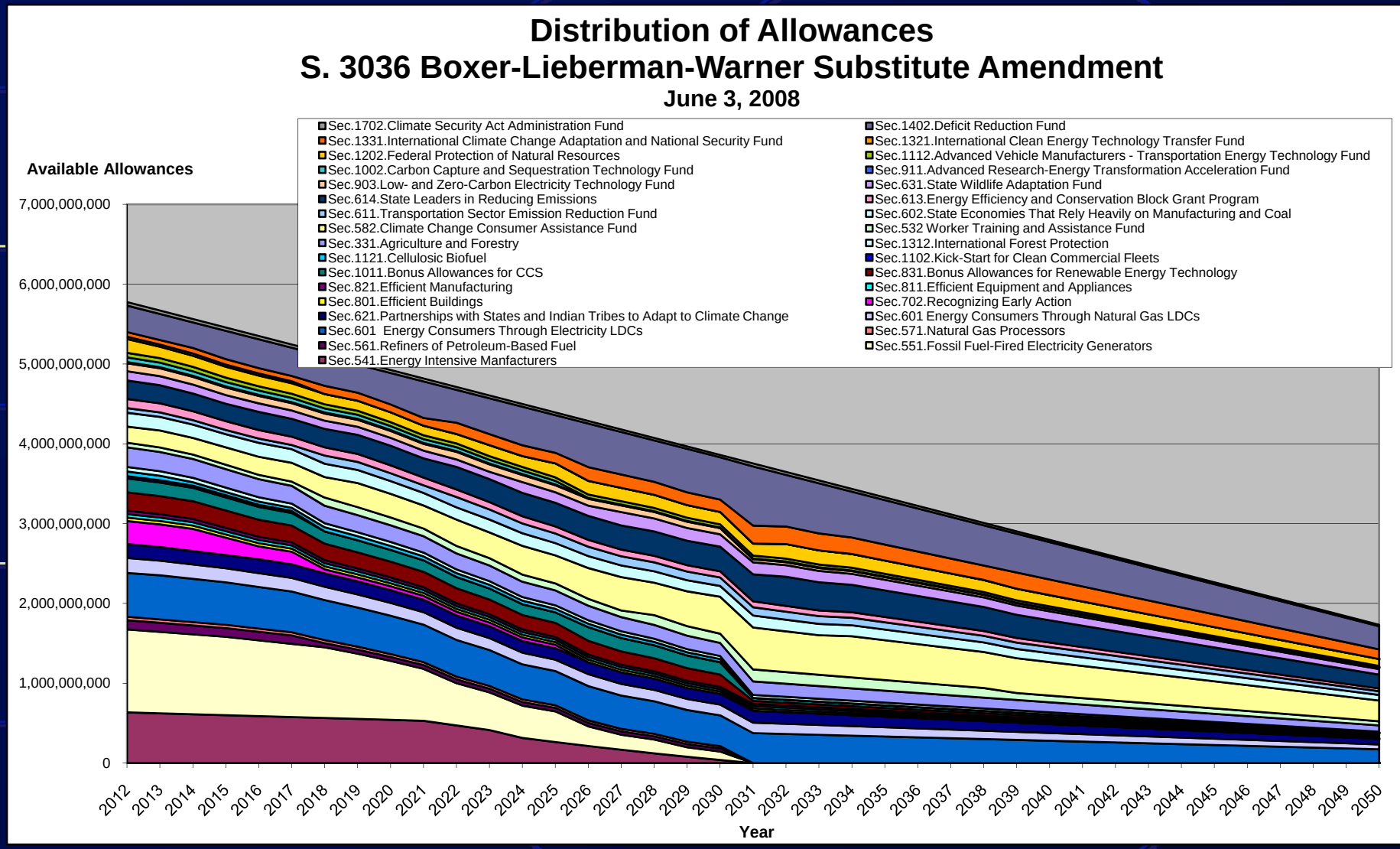
- For the northeast Regional Greenhouse Gas Initiative, RGGI, much attention focused on auction vs. allocation, but key innovation is using allowance value for energy efficiency

- RGGI modeling indicates that using allowance value for energy efficiency programs lowers cost of complying with the cap

# Outcomes to avoid

- Obscuring price signal, minimizing program effectiveness
- Creating perverse incentives or market barriers
- Allocations to entities capable of passing through rising prices - windfalls

# Boxer-Lieberman-Warner Distribution

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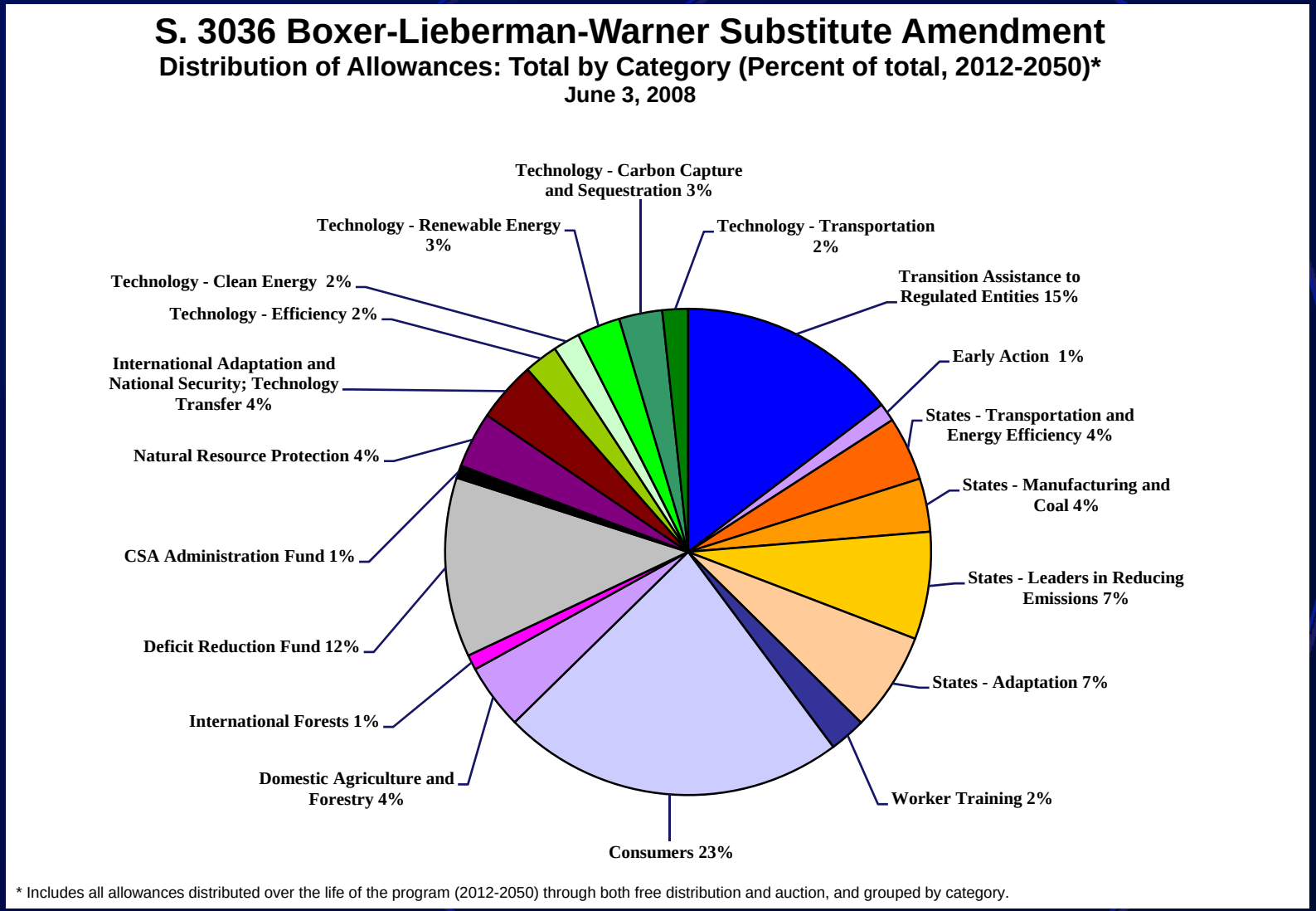
# Lieberman-Warner Distribution, cont'd

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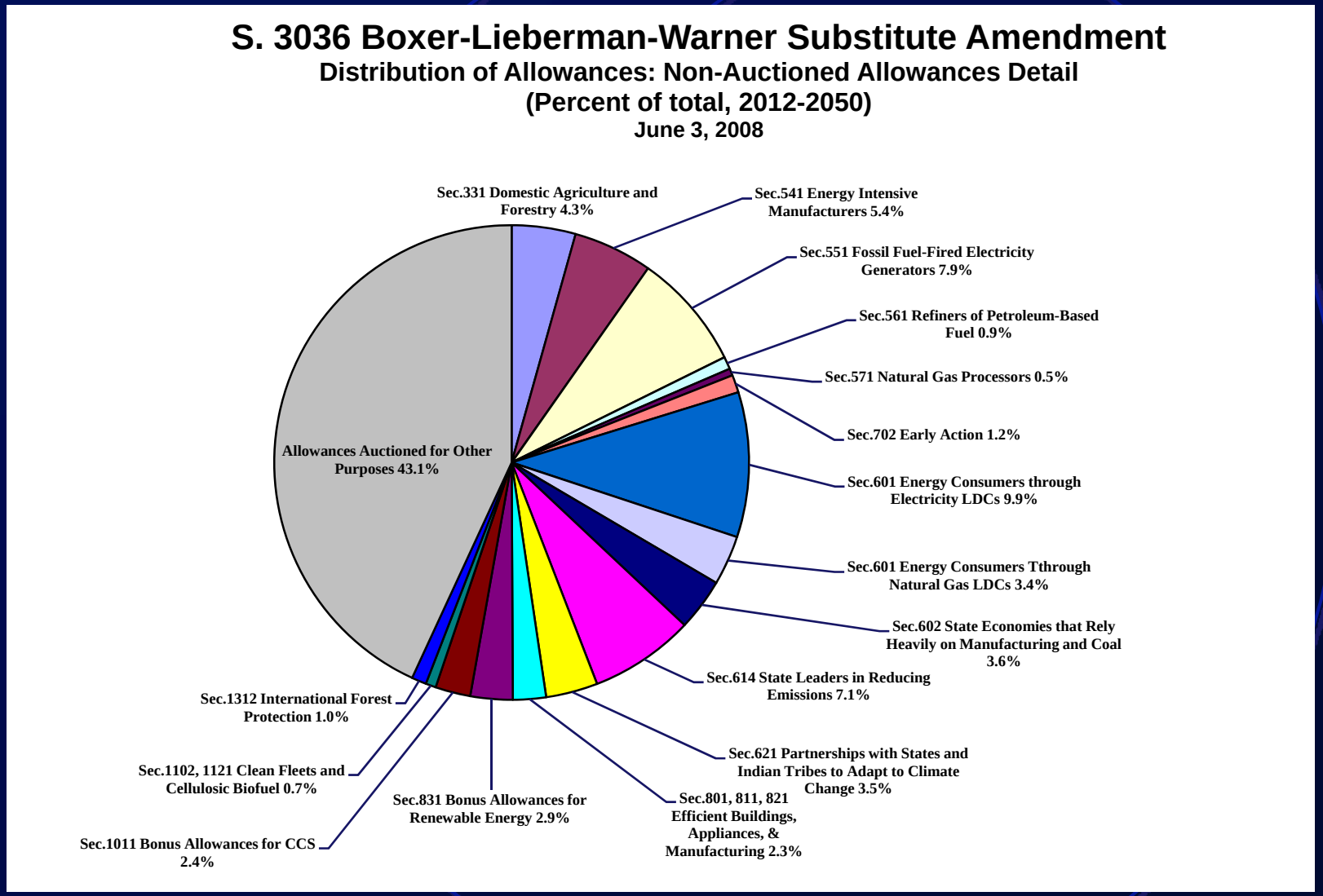
# Lieberman-Warner Distribution

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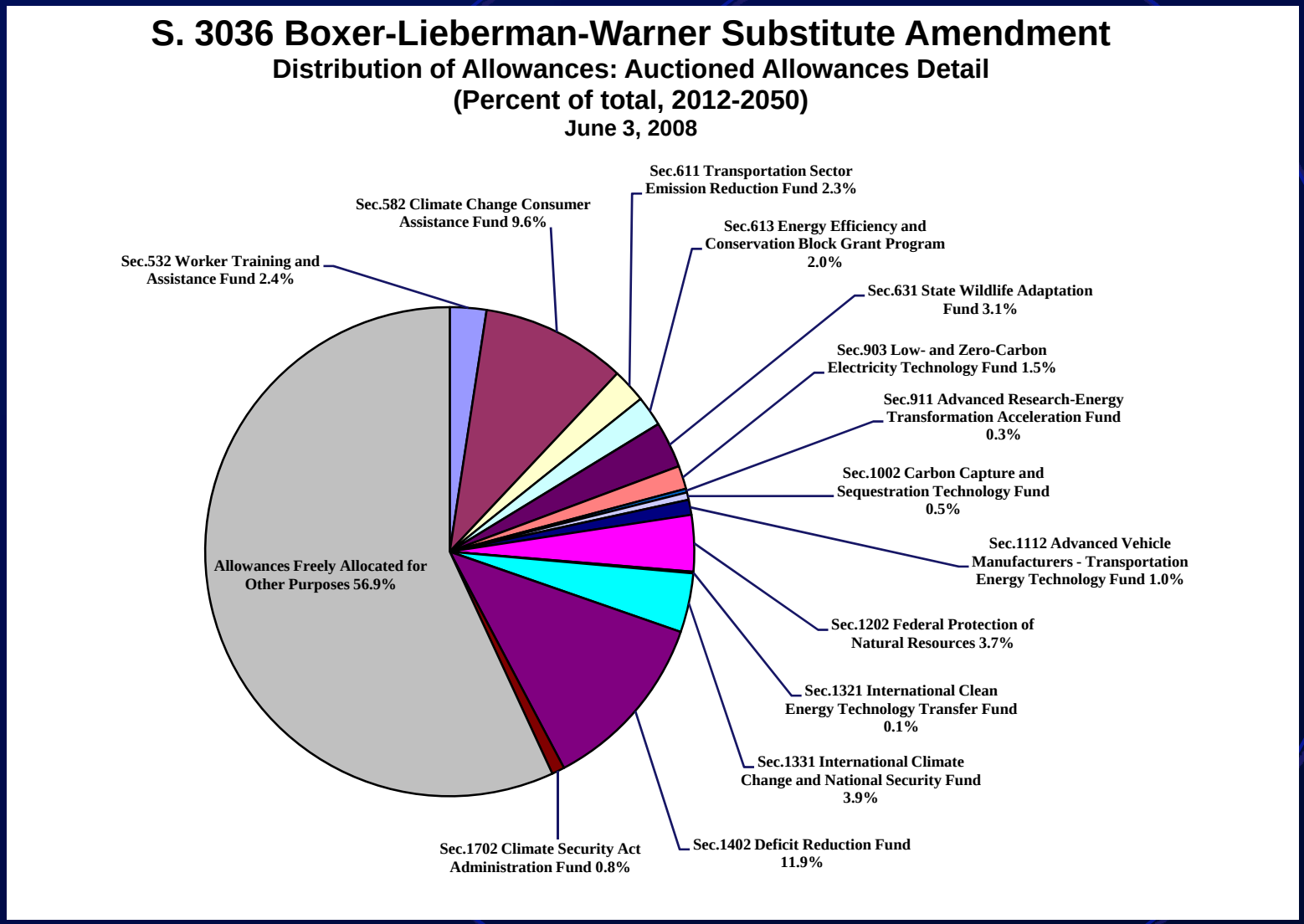


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# California MAC Allowance Distribution Principles

- Reduces the cost of the program to consumers, especially low-income consumers
- Avoids windfall profits where such profits could occur
- Promotes investment in low-GHG technologies and fuels (including energy efficiency)
- Advances the state's broader environmental goals by ensuring that environmental benefits accrue to overburdened communities
- Mitigates economic dislocation caused by competition from firms in uncapped jurisdictions
- Avoids perverse incentives that discourage or penalize investments in low-GHG technologies and fuels (including energy efficiency)
- Provides transition assistance to displaced workers
- Helps to ensure market liquidity

# RGGI Purposes

- Auction proceeds are being used to
  - Promote energy efficiency measures
  - Mitigate impacts on electricity ratepayers and low-income consumers
  - Promotion of renewable and/or non-emitting energy technologies
  - Stimulate and reward investment in development of innovate emissions abatement technologies
  - Program administration