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# Carbon Pricing for Utilities

Presented to CAMPUT

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ICF International

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# Agenda

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- ICF Overview
- Historical treatment of emission credits
- Status of U.S. regulation
- Proposed treatment of GHG allowances
- Conclusions

# ICF History, Experience and Climate Services

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## **ICF History**

- Founded in 1969 – Forty years of experience
- Headquarters in the Washington, D.C. area; global presence with 31 offices throughout the world
- Working throughout the energy and environment space
  - Fuel and emission markets, environmental assessment and compliance, policy analysis
  - Air, water, waste
- More than 3,500 employees

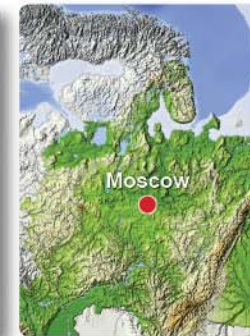
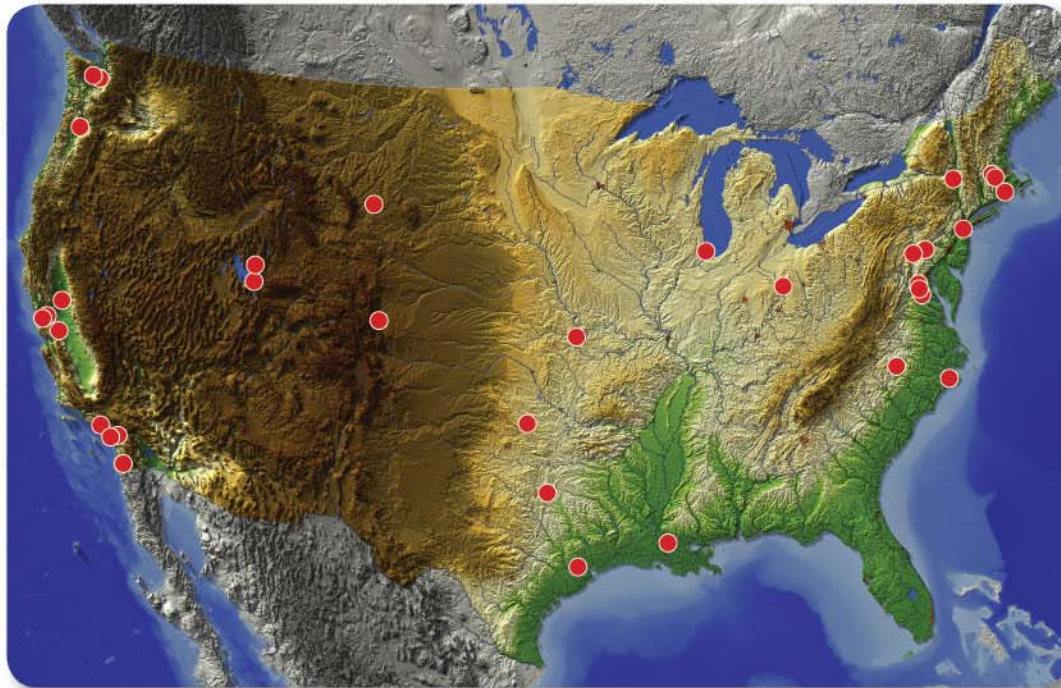
## **Highlights of Climate Experience**

- Over 230 professionals with climate-related expertise
- Provided climate policy advice to > 60 governments
- Providing climate strategy advice to > 65 companies in the FT Global 500

## **Climate Service Offerings**

- **Carbon market pricing analysis**
- **Compliance analysis**—how will legislation/regulation affect a company's operations/business
- **Energy efficiency**—portfolio assessment
- **Voluntary strategy support**—companies not likely to face compliance constraints
- **Value-at-risk**—how will various lines of business be affected by action on climate?
- **Financial industry**—investment portfolios, carbon offset businesses, etc. they are/have been developing
- **Carbon offset projects**—project feasibility, project support (PDDs), due diligence, market analysis
- **Carbon footprinting**—initial entrée leading to broader environmental/sustainability strategy

# Global Presence



## *International Headquarters*

9300 Lee Highway  
Fairfax, Virginia 22031

Albany, NY • Baton Rouge, LA • Bellevue, WA • Cambridge, MA • Charleston, SC  
Chicago, IL • Dallas, TX • Dayton, OH • Denver, CO • Gillette, WY • Houston, TX  
Irvine, CA • Lexington, MA • Los Angeles, CA • Middletown, PA • New York, NY  
North Kingstown, RI • Oakland, CA • Ogden, UT • Oklahoma City, OK  
Overland Park, KS • Portland, OR • Research Triangle Park, NC • Rockville, MD  
Sacramento, CA • Salt Lake City, UT • San Diego, CA • San Francisco, CA  
San Jose, CA • Seattle, WA • Washington, DC

Beijing • London • Moscow • New Delhi • Rio de Janeiro • Toronto

# Award-Winning Performance

- Recognized year after year for excellent client support by *Environmental Finance* readers survey
- Best Advisor in four categories plus one Runner Up in 2009

MARKET SURVEY 2009	<b>Best Advisor -</b> EU Emission Trading Scheme
Environmental Finance	
PUBLICATIONS	
TWO YEARS RUNNING	

MARKET SURVEY 2009	<b>Best Advisor -</b> Kyoto Project Credits (JI & CDM)
Environmental Finance	
PUBLICATIONS	
TWO YEARS RUNNING	

MARKET SURVEY 2009	<b>Best Advisor -</b> North American Mandatory Markets
Environmental Finance	
PUBLICATIONS	
FOUR YEARS RUNNING	

MARKET SURVEY 2009	<b>Best Advisor Runner Up -</b> Renewables Finance North America
Environmental Finance	
PUBLICATIONS	

MARKET SURVEY 2009	<b>Best Advisor -</b> U.S. Emissions
Environmental Finance	
PUBLICATIONS	

# History of Emission Credit Treatment

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- New source offsets have been traded for >30 years. Typically traded as an asset for accounting purposes. Valued at market price.
- SO<sub>2</sub> allowances have been trading since early 1990s. NO<sub>x</sub> allowances since mid-1990s. Also treated as assets at market value for accounting purposes.
- Allowances in these programs have been allocated for free to electric generators.
- For rate-making purposes, freely allocated allowances have been assigned zero value. Only allowances purchased and sold have been assigned market value.

# Status of U.S. GHG Legislation

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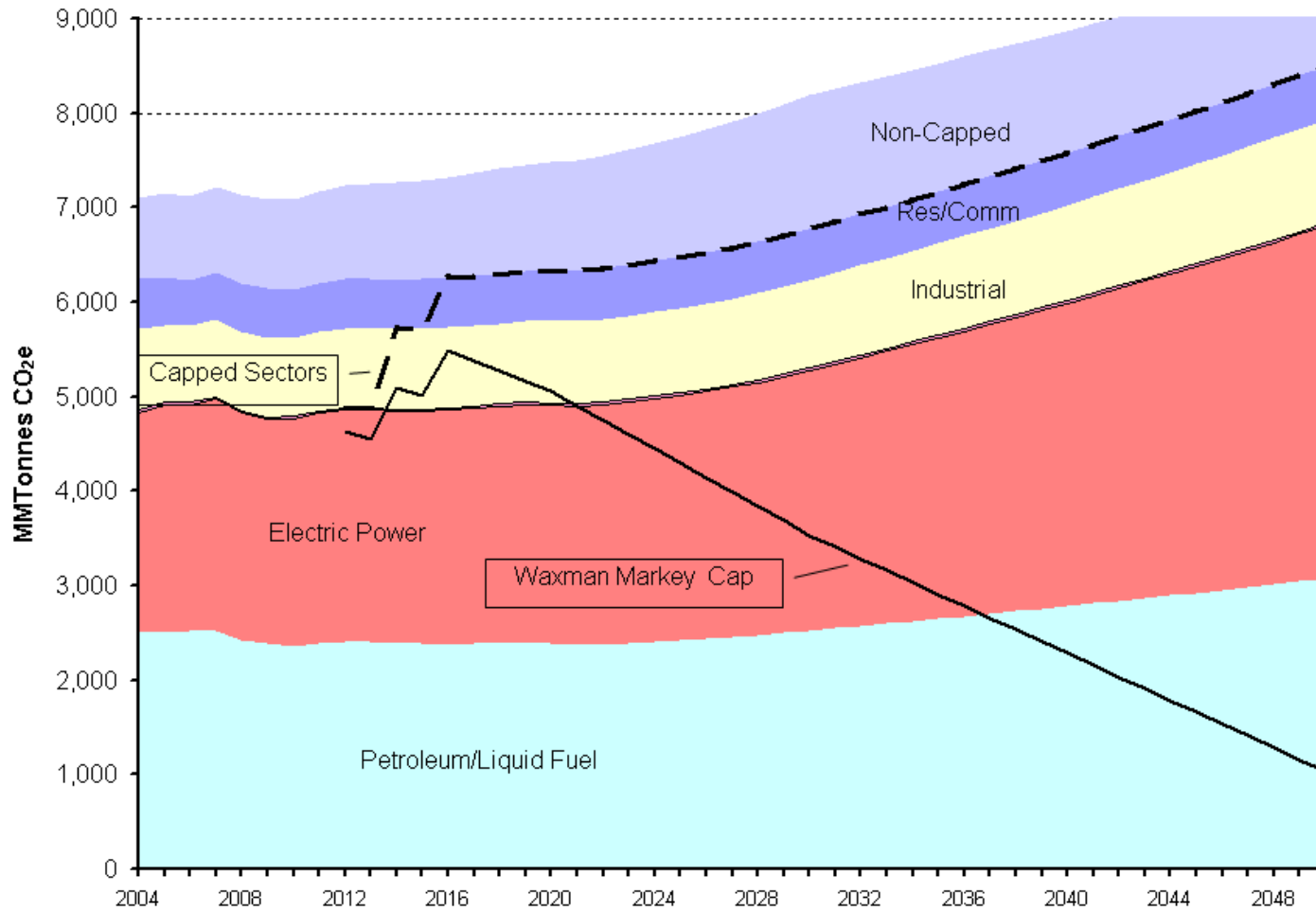
- The American Clean Energy and Security Act (H.R. 2454) (Waxman-Markey) was passed by the House of Representatives on June 26, 2009 by a vote of 219 to 212.
- ACES establishes a cap-and-trade program covering most US greenhouse gas emissions (GHGs), and for electric utilities, a federal renewable electricity and energy efficiency standard (RES).
- The Senate Kerry-Boxer Bill was released on September 30, 2009. Contains most of the same provisions as ACES with a few changes and some strategic omissions.
- Senate bill was stalled in EPW committee due to a Republican boycott but voted out over their objection.
- Senators Kerry, Graham and Lieberman have been working on a version that might garner enough votes for passage in the Senate. Currently bound up in Senate politics.

# ACES Point of Regulation (Who is Covered)

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- At point of emission (downstream) for large emitting facilities
  - Electric utilities
  - Industrial facilities that emit >25,000 tons GHG/year
- At point of production (upstream) – for CO<sub>2</sub> emitted from combustion of fuel produced or delivered.
  - Petroleum refiners and importers
  - Coal to liquids plants
  - Natural gas liquid producers
  - Gas LDCs (for deliveries to non-covered entities)
  - Producers and importers of high GWP gases
- Oil and gas production not covered

# Waxman-Markey Cap

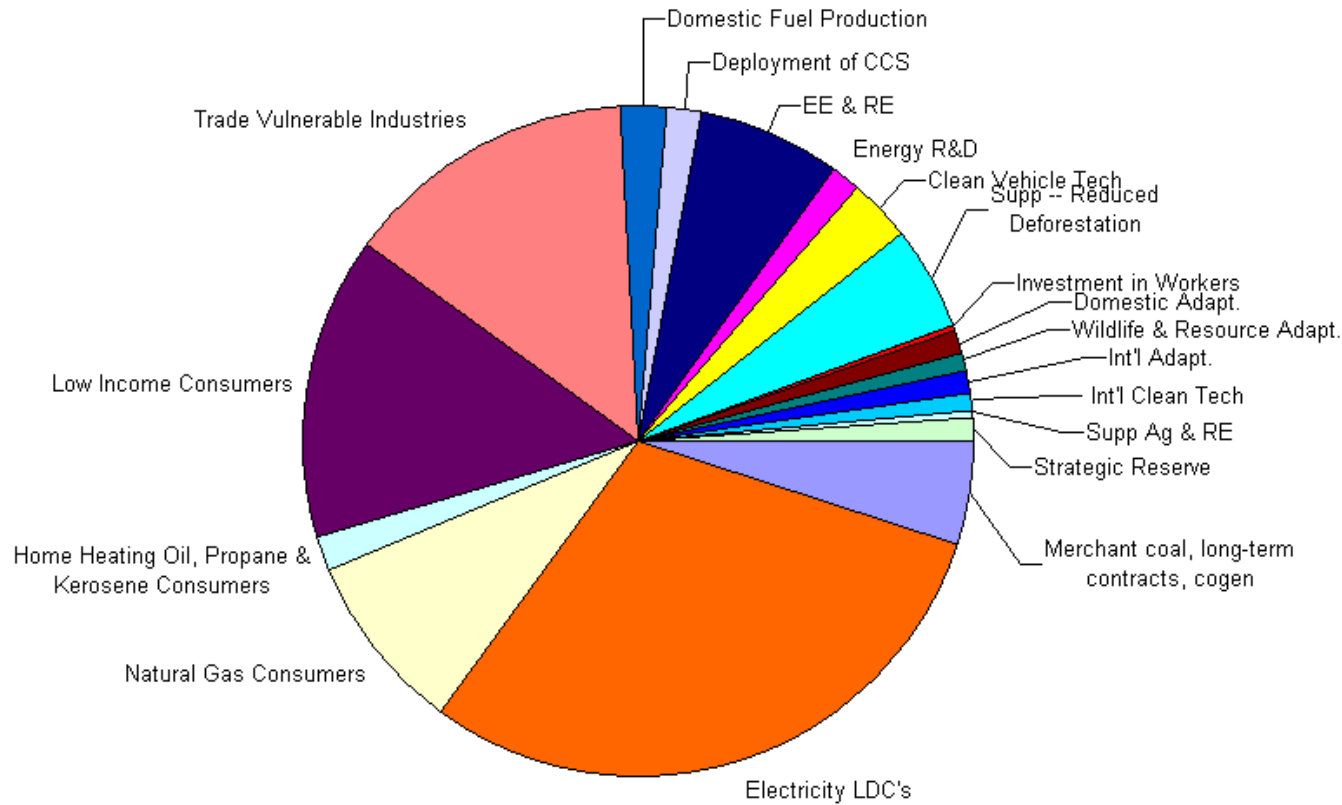


# Allowance Allocation

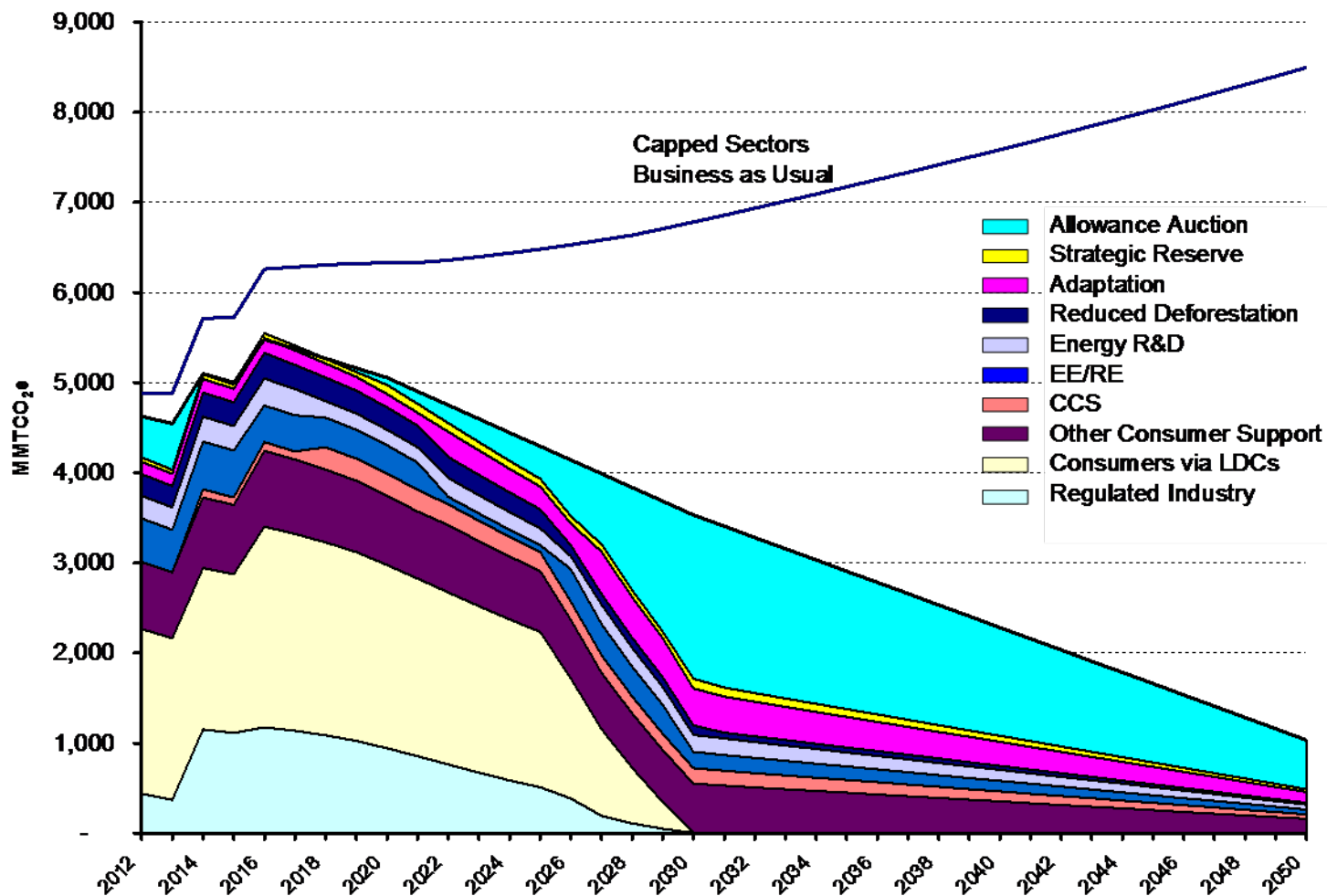
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- Electric and gas utilities to receive free allowances “for the benefit of consumers”. Also allowances to states for home heating oil and propane users.
- Merchant coal plants to receive allowances that do not create a “windfall”. Allocation to power plants with long-term contracts. Allocation to oil refineries for direct emissions.
- Certain carbon and energy-intensive industries subject to foreign competition to receive allowances.
- Allocations to states for energy efficiency and renewable projects.
- Remaining allowances to various public and R&D funds.
- Regulated entities must purchase needed allowances either through the auction, from other regulated entities, from non-regulated entities who receive allowances or from third parties.

# Waxman Markey Allocation 2016



# Waxman-Markey Allowance Allocation



# Implications of Allocation

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- Allowances allocated to utilities (not generators) “for consumer benefit”.
  - Likely to be 10s of billions of dollars per year.
- In restructured states, utilities will sell allowances. PUCs likely to require proceeds be spent for energy efficiency and consumer rebates.
- In non-restructured states, utilities will want to use allowances for compliance.
- These are very different consumer implications.
  - Is this a consumer benefit?
  - Will there be “rate leakage”?
- Will free allowances still be treated as zero value?

# Conclusions

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- U.S. legislation is likely to allocate an enormous allowance value to regulated utilities (gas and electric) for “consumer benefit”.
- State regulators will be required to direct the use of the allowance value.
- Outcomes could be very different for utilities in states with different regulatory structures.
- The regulatory treatment is likely to be very different from that under historical programs.
- Nevertheless there is extensive history and precedent for treatment of allowances.

# ICF Webinars

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- Free monthly webinar the second Tuesday of every month.  
<http://www.icfi.com/markets/energy/webinar/>
  - Focus on energy and environment, especially climate change.
  - Presentations are archived.

# Contact Information

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