

Destination: Transmission / Emission Transition



Actors/Authority
Aspirin
Output
Challenge
Impact

ACTORS / AUTHORITY
• Roles
• Relationships
• Responsibilities
• Resources



Products

Projects

Policy

Placets

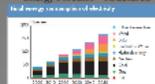
Last Thoughts



Energy Forecast - scrambling



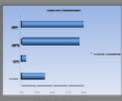
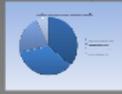
Energy Forecast - structured



Recent News



Current Perceptions



Destination: Transmission / Emission Transition



Recent News

Obama Calls for One-Third Reduction
in Crude Oil Imports
31 March 2011

California is requiring its large utilities to devise
smart-grid goals for 2020.
April 25, 2011

"The electric transmission system in the western U.S.
is inadequate to meet future NE loads"
Western Interstate Energy Board

Seniors Generation says it is selling half of
the Energy Sierra Juarez project to BP
April 19, 2011

U.S., Mexico Join International Renewable Energy
Agency; First Assembly Planned in April in Abu Dhabi
March 15, 2011

Renewable Sources Could Provide 77% of World's Energy by 2050
NY Times, May 9 2011

NY Times, May 9 2011
Intergovernmental Panel Chairs Outline for Renewable Energy

US Sen. Udall pushes for renewable energy
standard for electric utilities
Apr April 7, 2011



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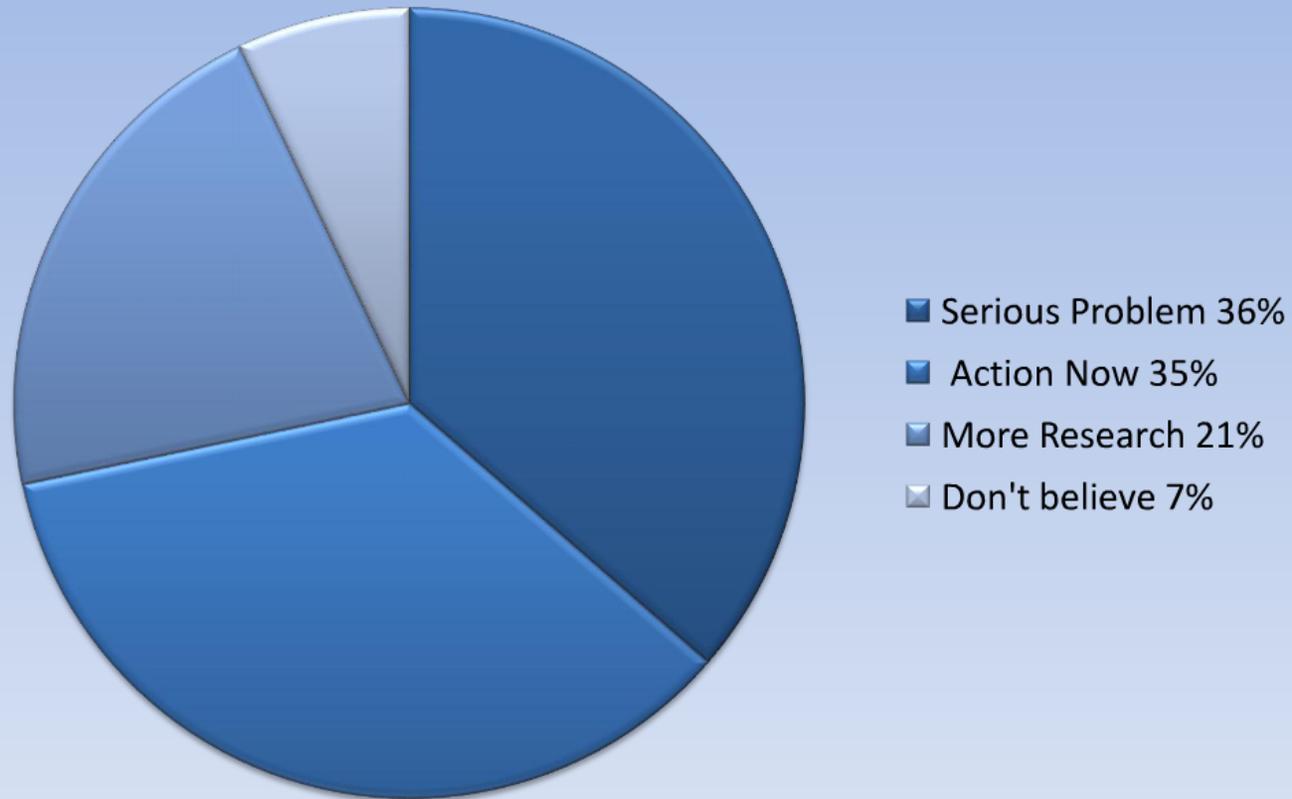
NY Times, May 9 2011

Intergovernmental Panel Charts Options for Renewable Energy

NY Times, May 9 2011

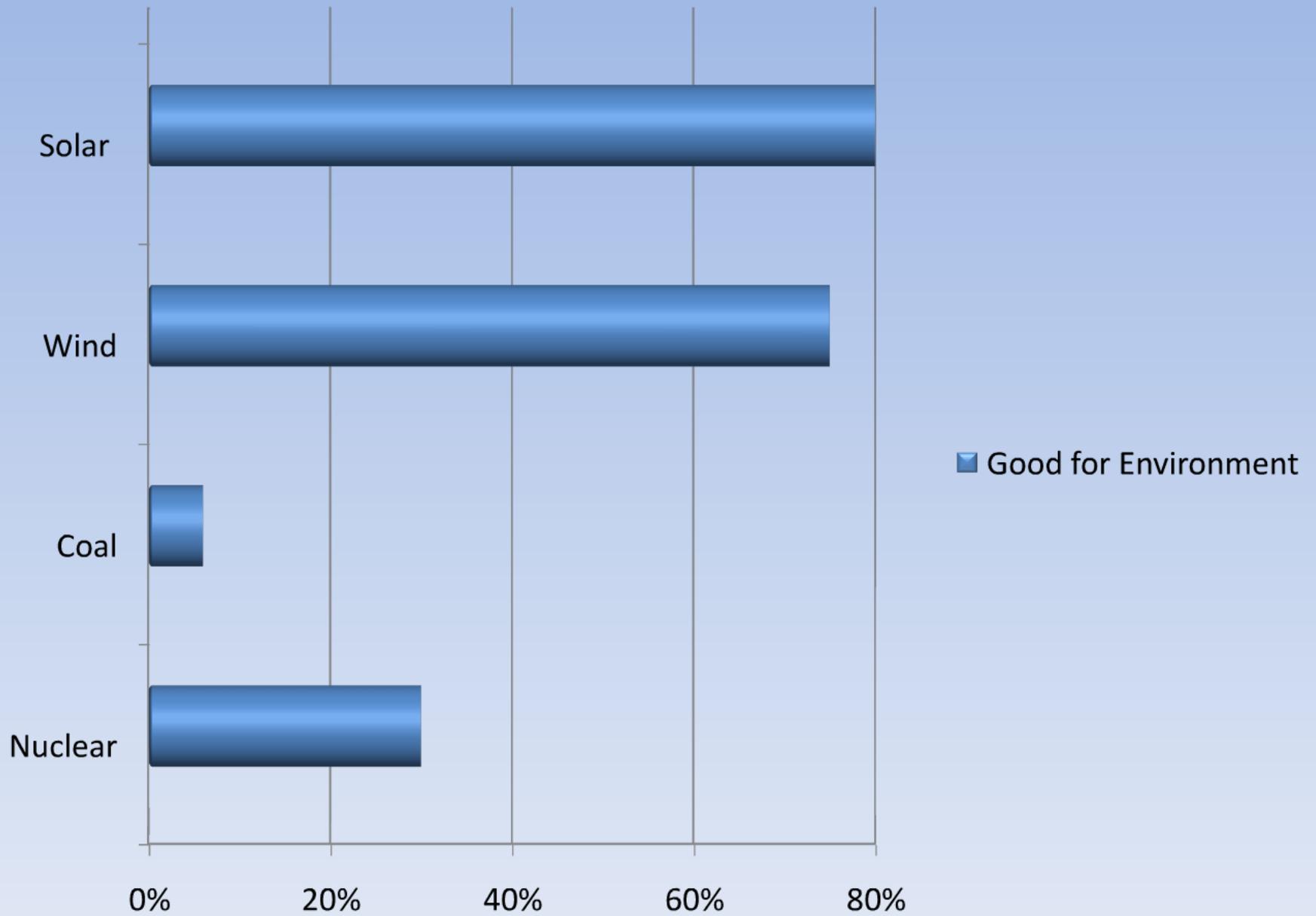
Current Perceptions

People's Concern over Climate Change



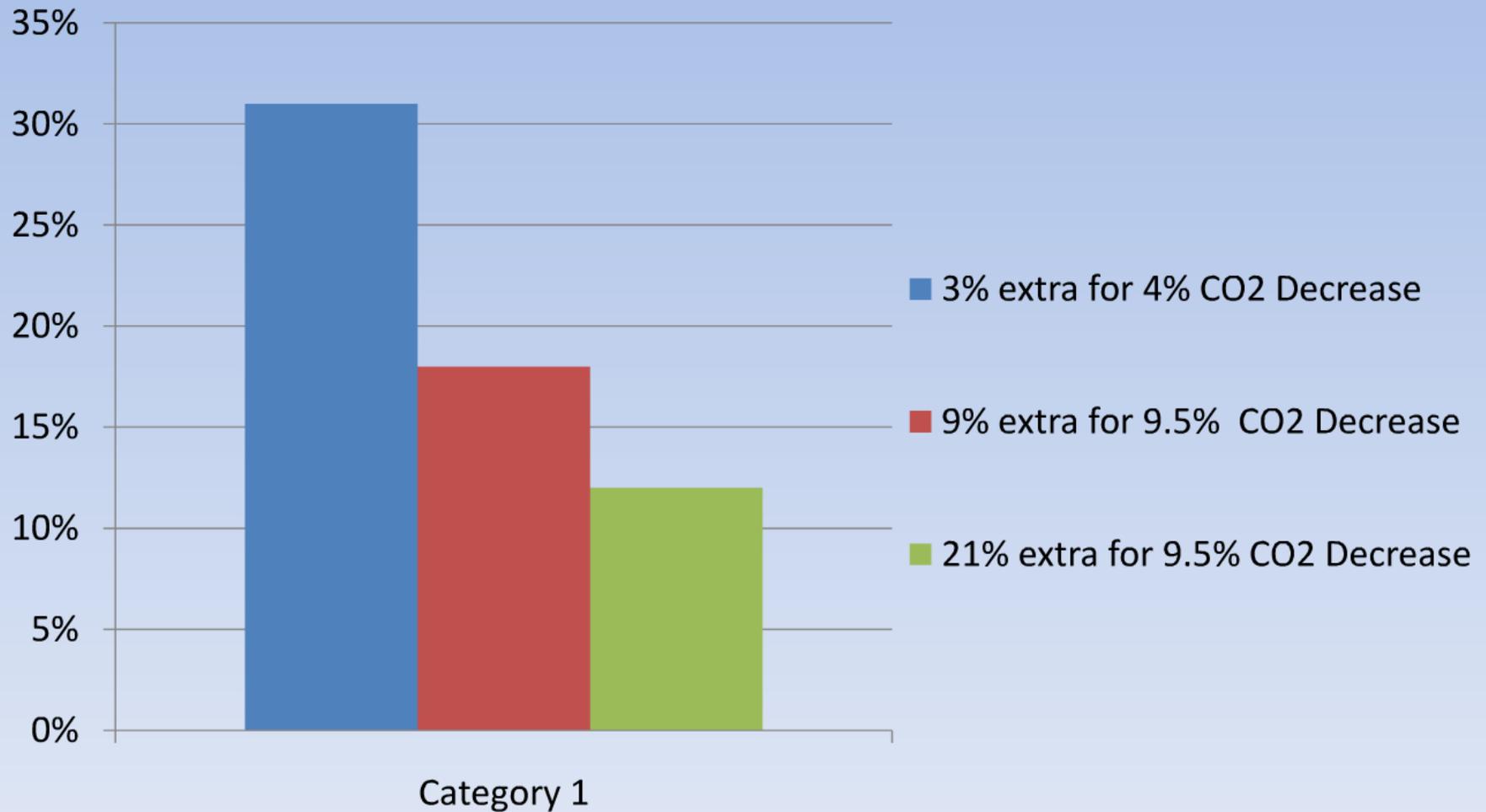
*WestGroup Research survey results 2011

Good for Environment



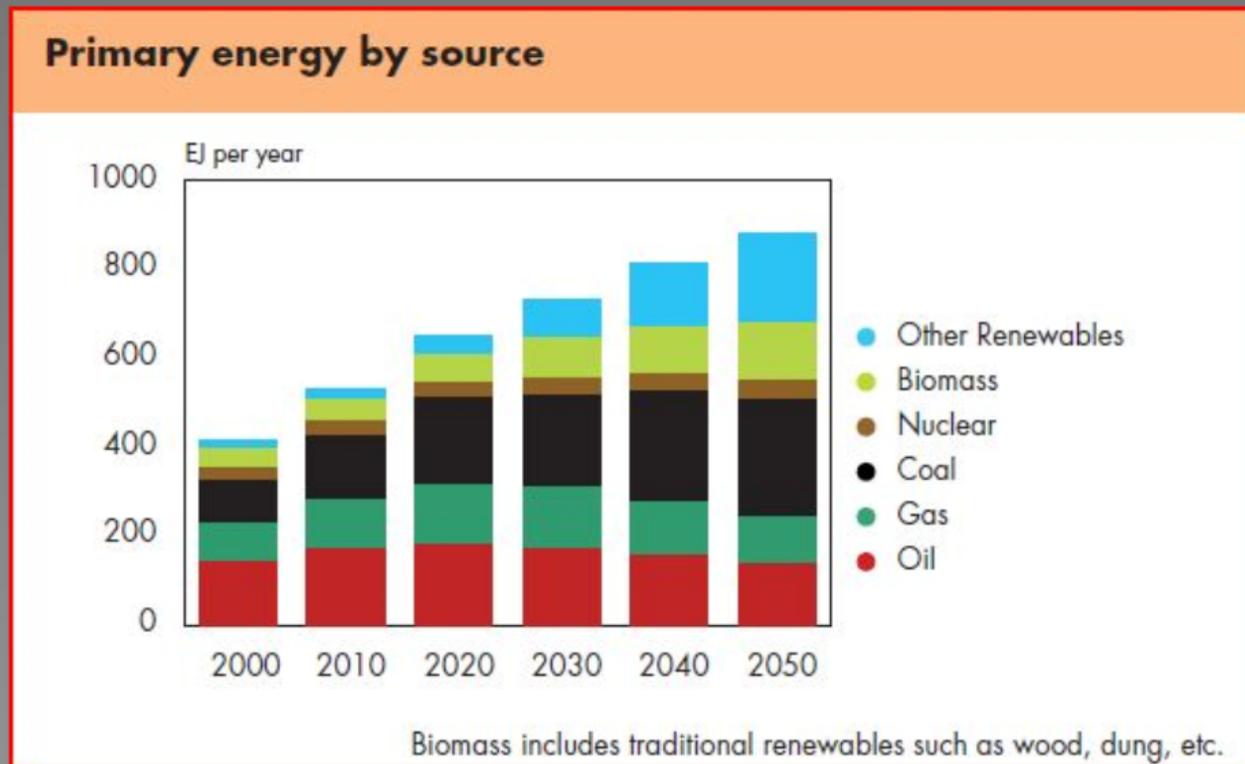
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Willingness to Pay Larger Bill for Carbon Reductions



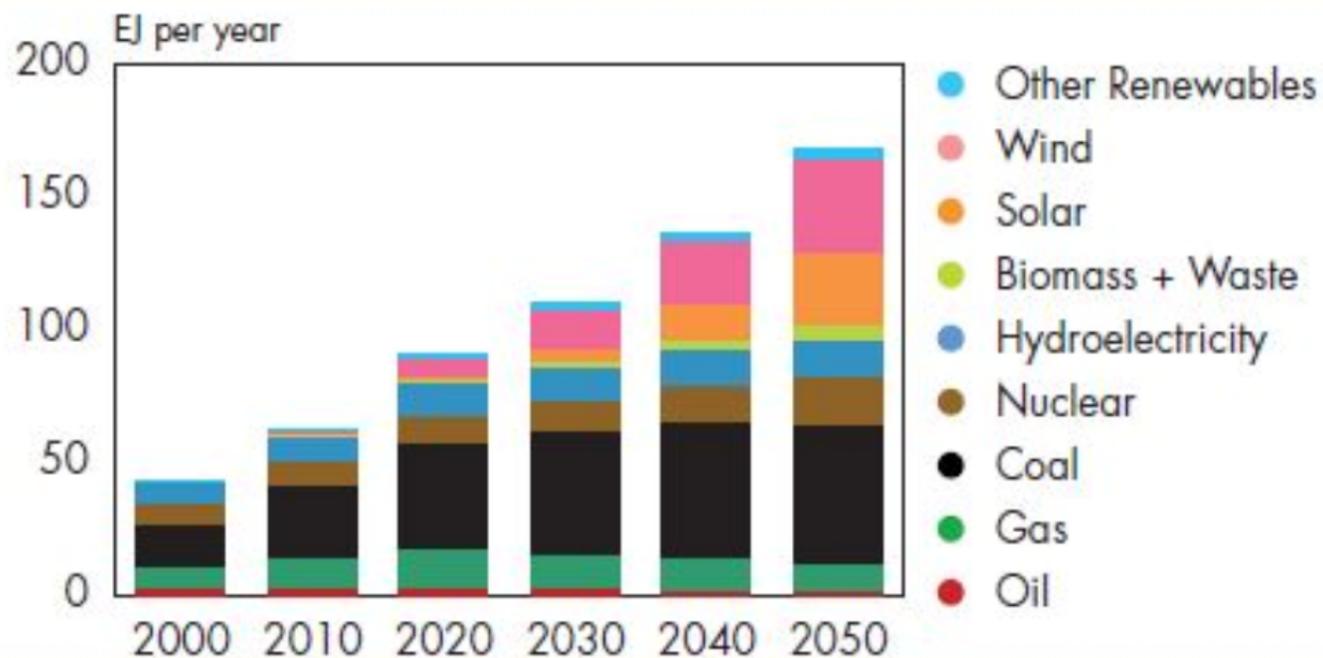
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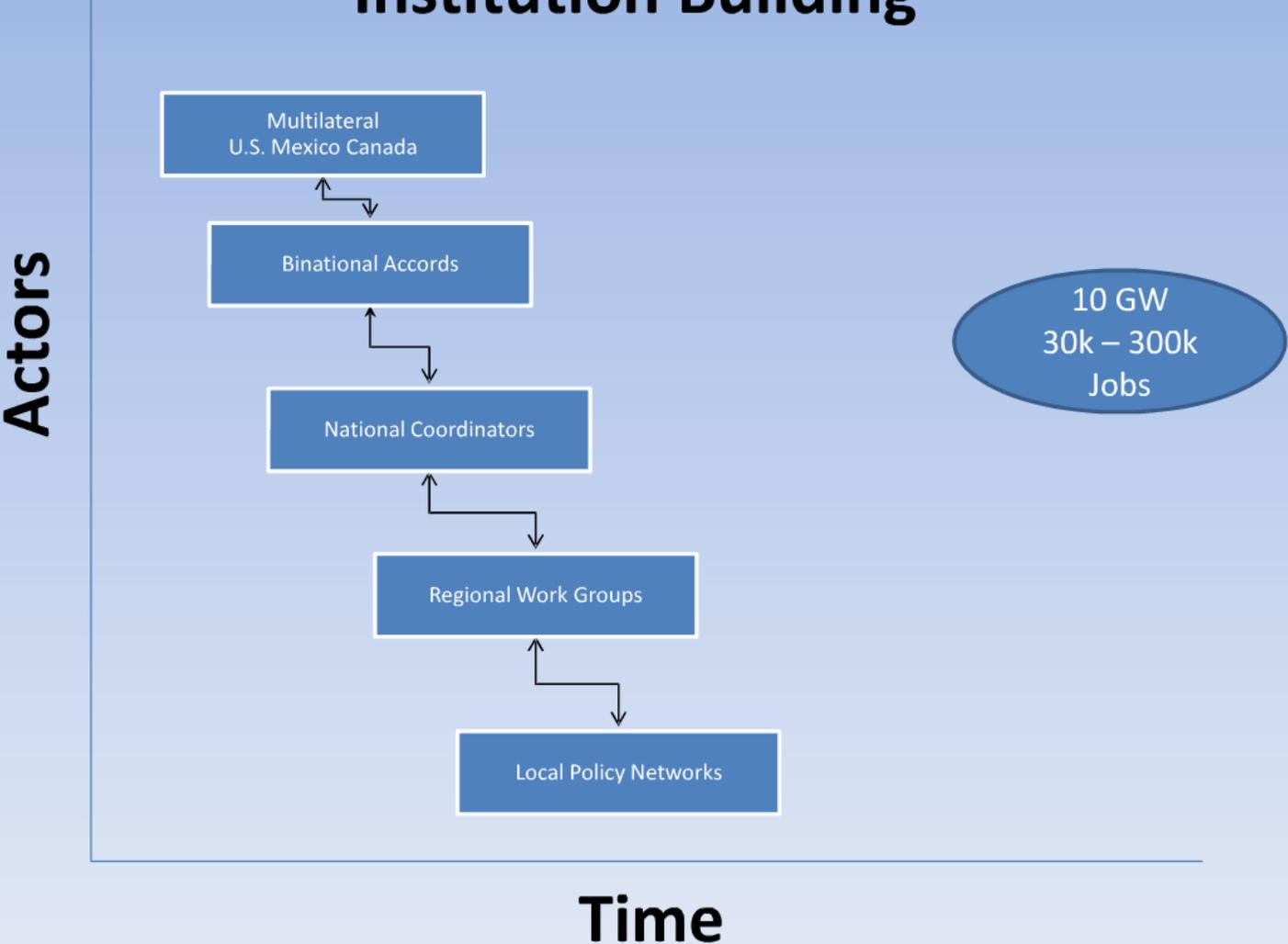


Energy Forecast - structured

Final energy consumption of electricity



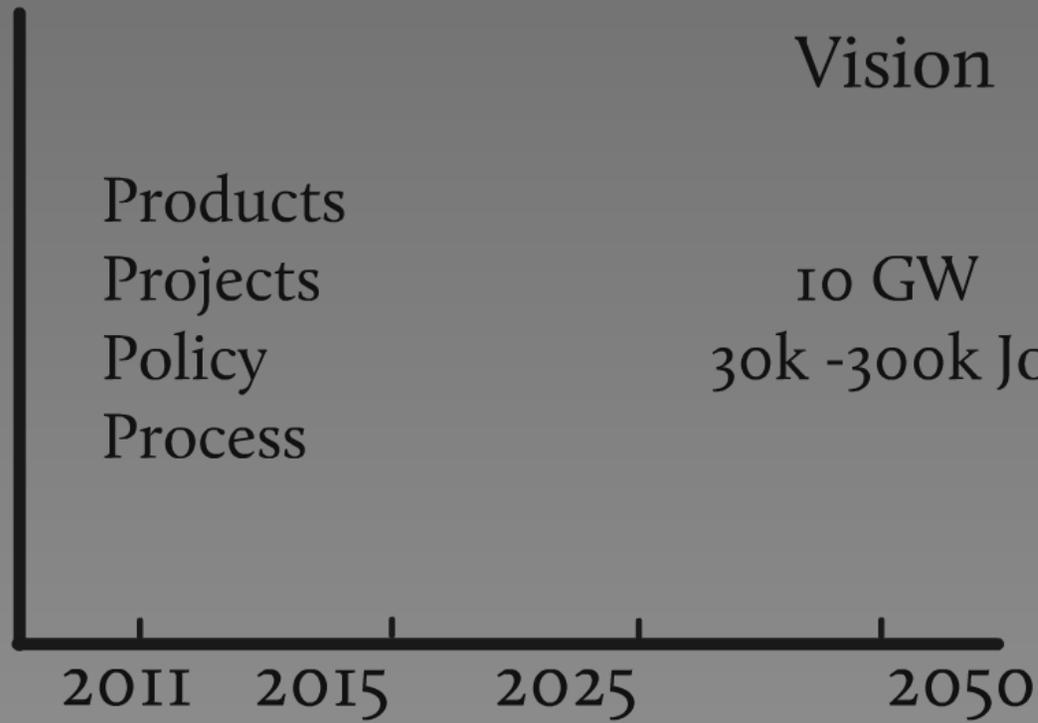
Institution Building



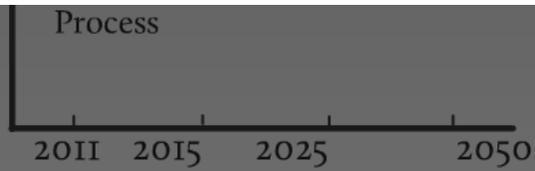
Actions



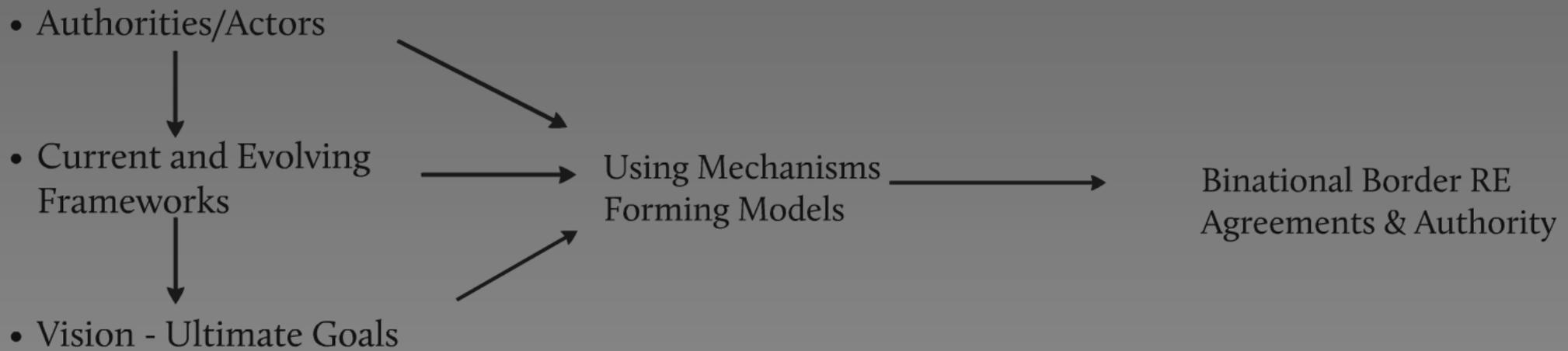
Vision



10 GW
30k -300k Jobs



Simplified Roadmap



Actors/Authority

Activity

Output

Outcome

Impact

ACTORS / AUTHORITY

- Roles
- Relationships
- Responsibilities
- Resources

Presidential Permit 1968

- Construction and maintenance of facilities connecting U.S. to foreign country

connecting U.S. to foreign country

La Paz 1983

- Border: Definition, Environment & Security

LGEEPA- Mexico 1996

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LGEEPA- Mexico 1996

- Environmental Policy & Regulation
- Natural Resource Protection
- Hazardous Waste Management
- Public 'Right-to-Know'

NAFTA 1993

ACTORS

SEMARNAT Mexico (2000)

- National Ecological Institute
- National Water Commission
- Fed. Bureau of Environmental Protection
- National Commission for Natural Protected Areas

- Hazardous Waste Management
- Public 'Right-to-Know'

NAFTA 1993

- Trilateral Free Trade Agreement
- Environmental Planning Obligations
 - * except agriculture

CEC 1993

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- Environmental Planning Obligations
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CEC 1993

- Canada U.S. Mexico Co-operation
- NAFTA Environmental Opportunities/Challenges
- TEIA's

ESPOO Convention 1991

- TEIA's

ESPOO Convention 1991

- Each Country's Environmental Duties & Obligations
- Cross Border Co-operation
- Enacted 1997

JPAC

- Cross Border Co-Operation
- Enacted 1997

JPAC

- Trilateral Air Quality Committee
- Within NAAEC -the environmental side of NAFTA

Consul General Border Liaison Mechanism 1993

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- Allow Local Governments to Negotiate Solutions
- Encourage Economic Development
- Security & Safety

DOI - Border Field Coordinating Committee

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DOI - Border Field Coordinating Committee

- La Paz Working Group
- Facilitate & Coordinate Communication among 7 U.S. DOI Bureaus & Offices

WRP 2007

- Senior Level Policy Partnership
DOD - Federal - State - Tribal
- Regional Level
- Information Exchange
- Leveraging Resources
- Link with Stakeholders
- GIS

ACTORS

Clean Energy Deployment Administration -CEDA (proposed)

- Independent branch of DOE
- Credit Support for Clean Energy Deployment
- Loans, Loan Guarantees, Clean Energy Bonds etc.
- Aggressive Technology Development Goals

Products

Regular RPS / Renewable Energy Cooperative (REC)

Renewable Energy Investment Fund (REIF)

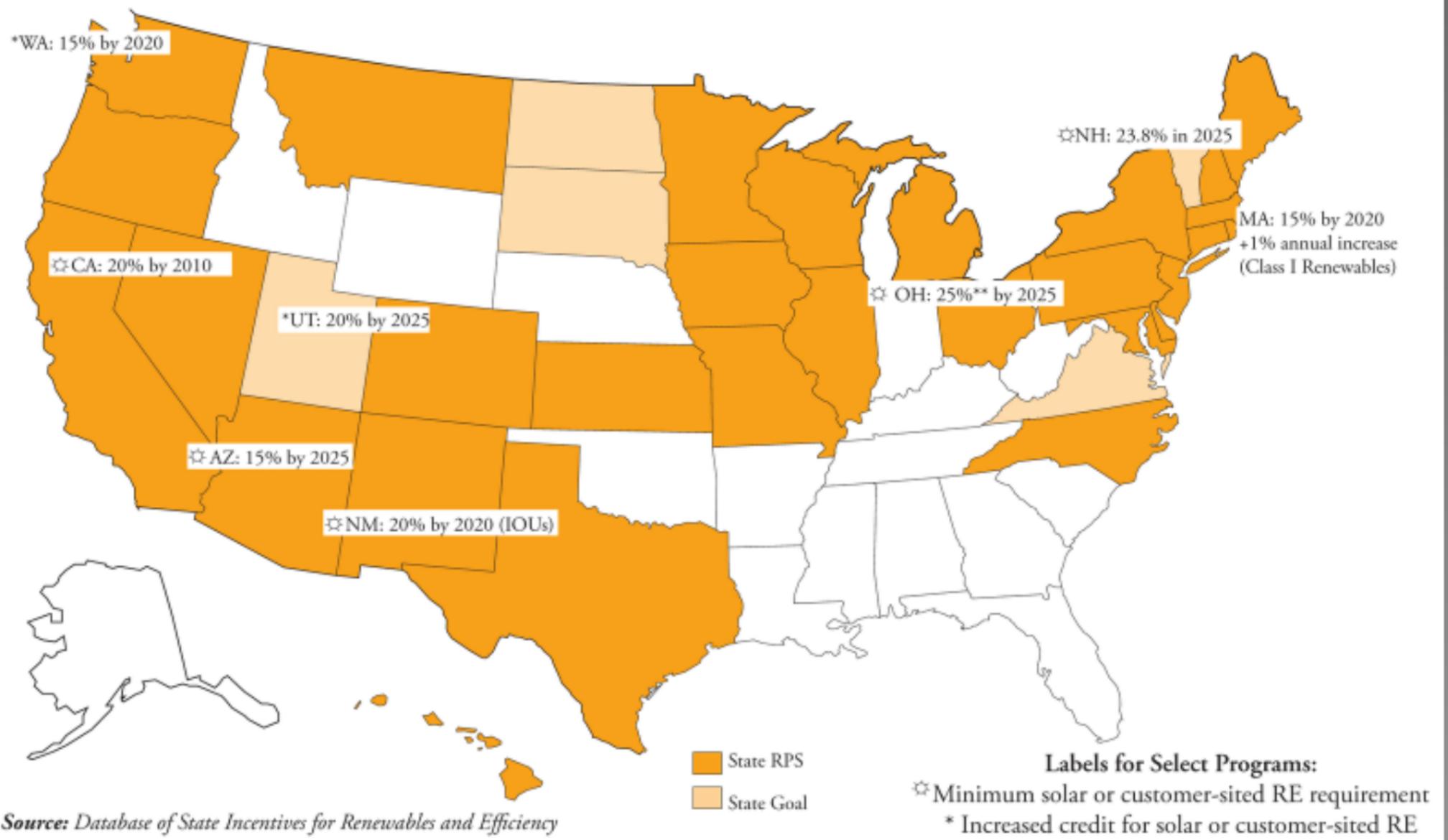
GHG Trade

Bi-National RE Standards

Energy Information Administration (EIA)

Projects

Renewable Portfolio Standards/Goals in the U.S. (September 2009)



Source: Database of State Incentives for Renewables and Efficiency

Projects

RE Storage

Promote Intermodal ports

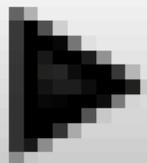
Military Biofuels

Transmission investment

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- Bundling RE power sources Sun -Wind- Geotherm.
- One supply to meet peak demands
- Interconnecting geographically different RE regions

YOU



Policy

Incentives

Legislative harmonization

CO₂ pricing mechanism

Cross border cooperation

- Increases the speed of innovation
- Deployment of new technology
- Increase in jobs

Process

P 3

TRTSA

Trade Organizations

Community based strategies

2020

- Individuals, states and regions will take the lead and become progressively linked.
- Business will demand standards to overcome patchwork regulation.
- Critical mass of change forced at a government level.

Last Thoughts