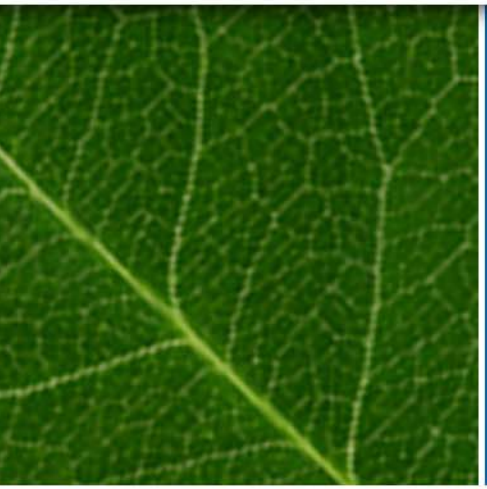
ENVIRONMENTAL
ENTREPRENEURS



The Green Economy

How Federal Policy Can Drive Success

Agenda

Cleantech Investment and Key Findings

Areas of Opportunity

Policy Recommendations

Environmental Entrepreneurs

E2 Is a National Community of Business People Who Promote Sound Environmental Policies that Stimulate Economic Growth

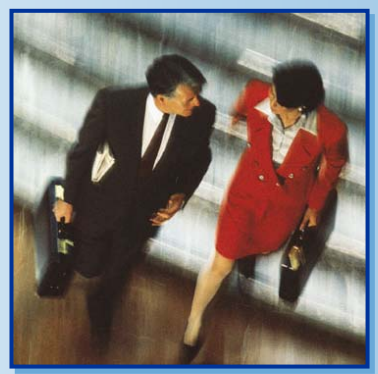
NATIONAL

- Non-Partisan Organization
- 25 States and Growing

BUSINESS LEADERS

- Affiliation of Entrepreneurs and Executives Who Have Created More Than 800 Companies and 400,000 Jobs

FAST-GROWING



- Since 2000:
  - Membership Has Grown to 800
  - Network Has Grown to 2,600
- $20B Under Management

The Green Economy

- Growing Demand for Renewable Energy and Fuel Sources
- Volatile Oil Prices
- National Security Implications
- Acceptance of Global Warming / Carbon Constraints
- Access to Superior Alternative Energy Technologies
- State and National Policies

CLEAN TECHNOLOGY PRODUCTS

Optimize Use of Natural Resources and Reduce Waste / Pollution

Exploit Innovations / Applications of New Technologies

Offer Cost and Quality Advantages Over Traditional Alternatives

The Impact of the Green Economy

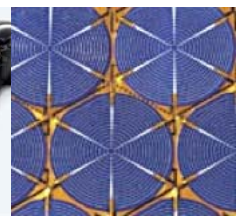
Cleantech Growth

=

Cleaner Environment

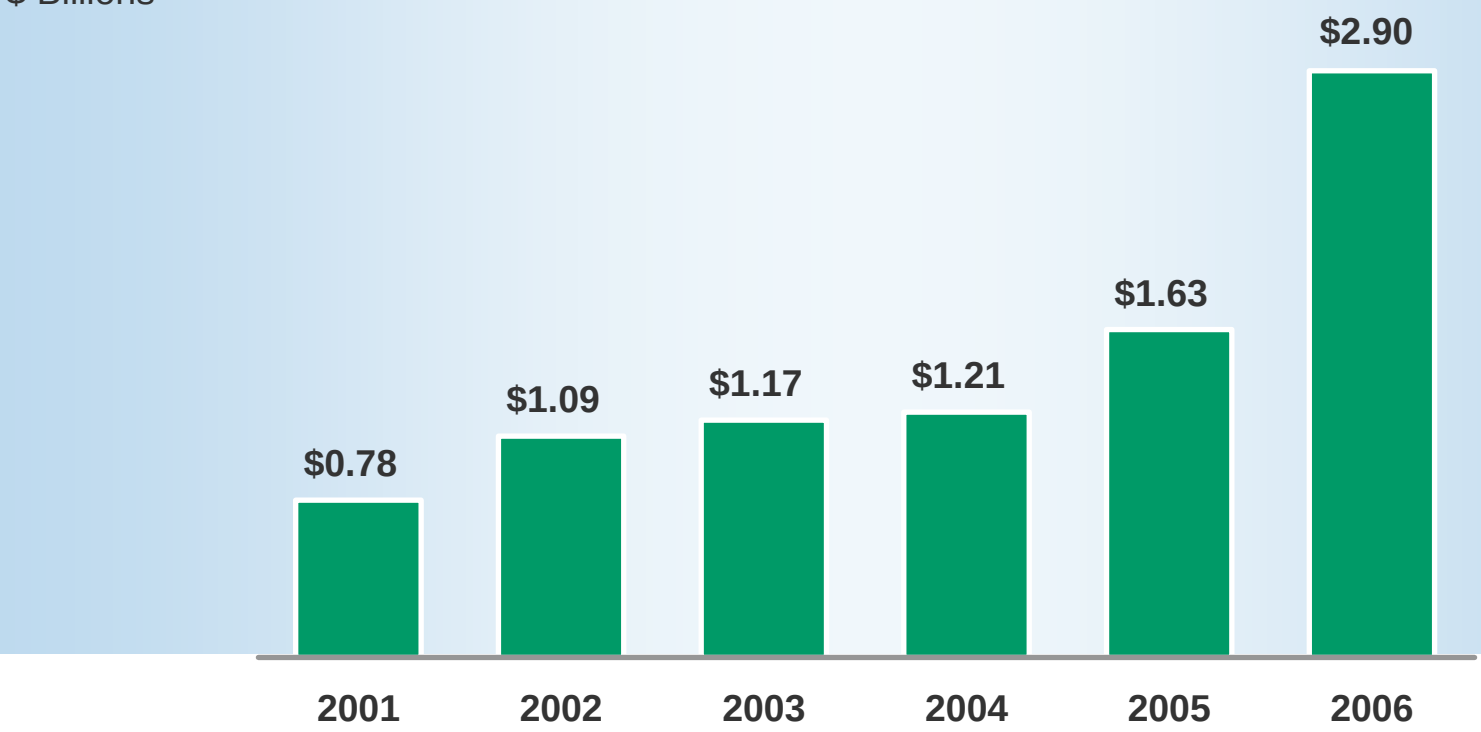
Jobs

21st Century Exports



Cleantech Investment Has Accelerated

NORTH AMERICAN CLEANTECH VENTURE CAPITAL INVESTMENT

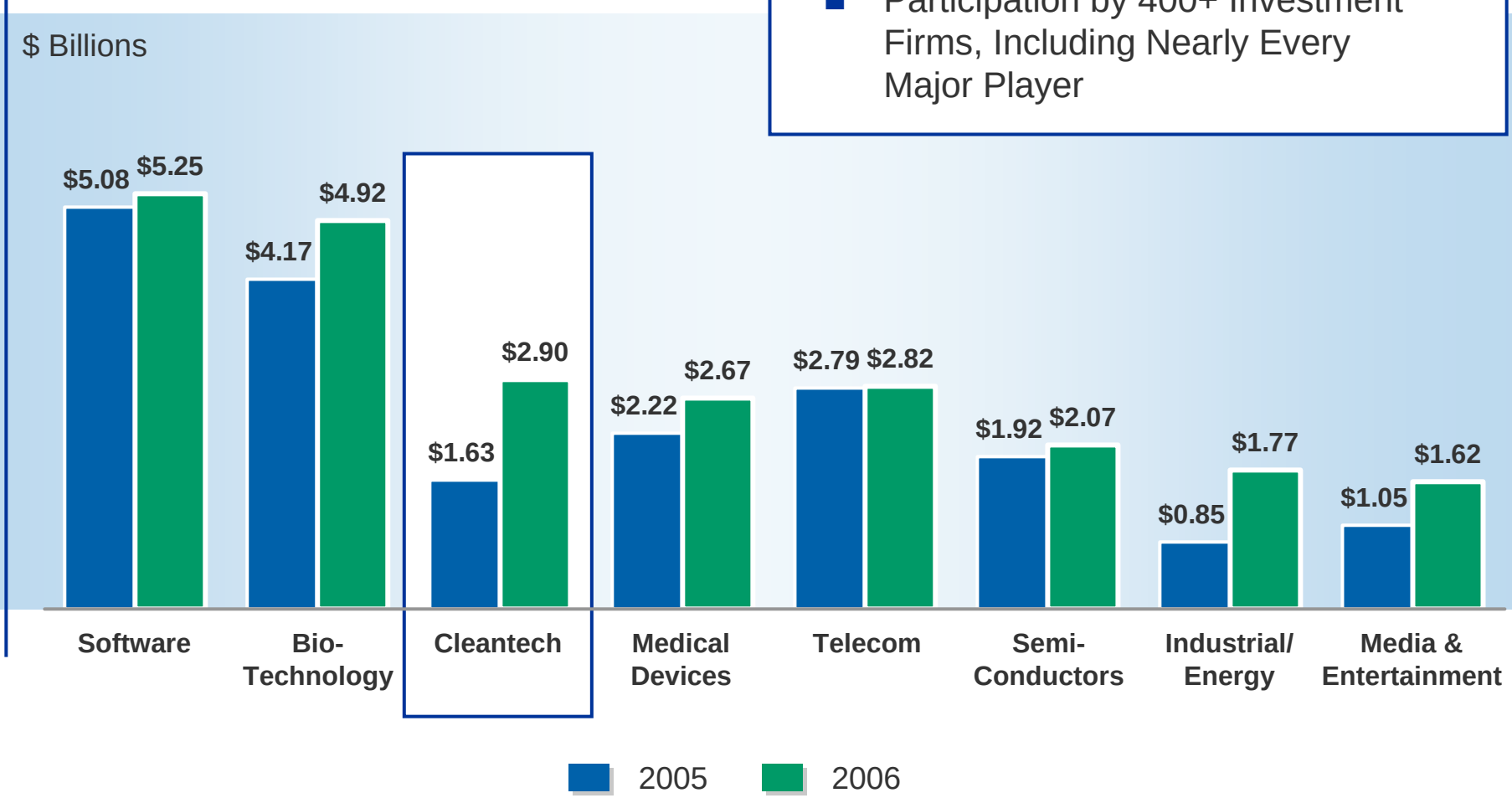


Source: Cleantech Venture Network, 2006

The Third Largest VC Investment Category

NORTH AMERICAN VENTURE CAPITAL INVESTMENTS BY SECTOR

- Fastest-Growing Category
- Participation by 400+ Investment Firms, Including Nearly Every Major Player



Source: Cleantech Venture Network, 2006

National Policy Can Drive the Green Economy

ROLE

- Establish Performance Standards to Stimulate Competition
- Support Research and Development
- Provide Consistent, Long-Term Incentives to Consumers and Businesses

KEY AREAS OF OPPORTUNITY

Carbon Caps

Alternative Transportation Technologies and Fuels

Alternative Energy Generation

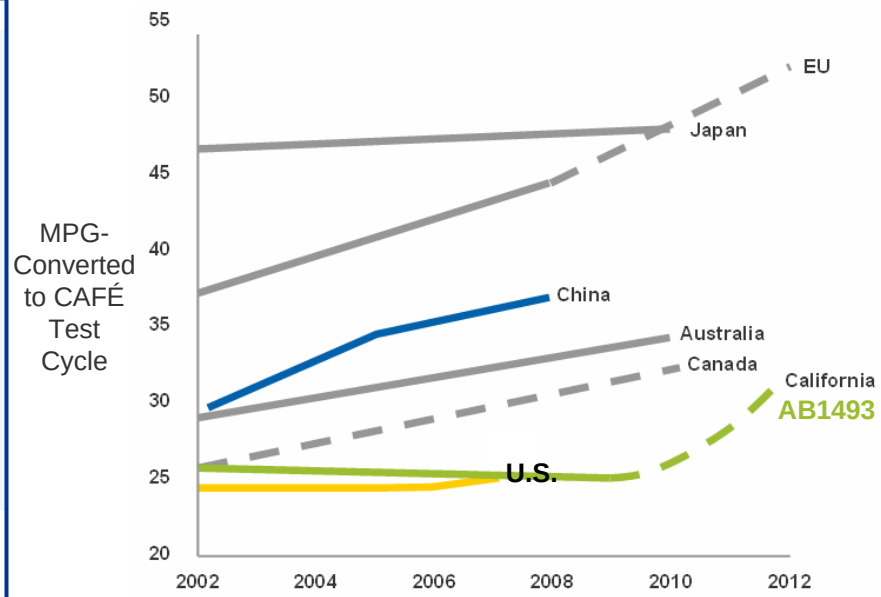
Energy Efficiency

Alternative Transportation

CURRENT SITUATION

- The U.S. Imports 66% of Our Petroleum, Principally for Transportation
- Transportation Is Responsible for:
  - 30% of Global Warming Emission
  - Particulate and Other Air Pollution Causing Health Problems

U.S. Trails Rest of World in Fuel Efficiency



(1) Dotted Lines Denote Proposed Standards
(2) MPG = Miles Per Gallon

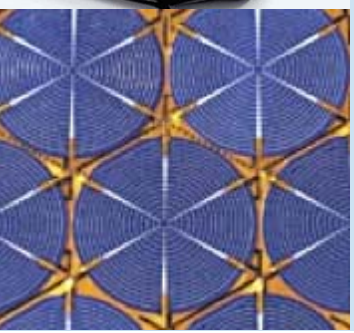
OPPORTUNITIES

- Domestic Fuel Production Keeps U.S. Dollars at Home
- Reduced Pricing and National Security Risks
- Diversified Fuel Sources and Increased Vehicle Choices

Transportation Innovations

DESIGN	■ Lighter Materials ■ Low Friction Tires ■ Aerodynamic Design
VEHICLES	■ Gas/Battery Hybrids (e.g. Prius) ■ All-Electric Vehicles (e.g. Tesla) ■ Plug-In Hybrids
ALTERNATIVE FUELS	■ Ethanol from Sugar Crops ■ Cellulosic Ethanol ■ Biodiesel
BATTERIES	■ Long Life, High Energy Density Li Ion Batteries for Hybrids

Policies to Support Growth of Alternative Transportation Technologies

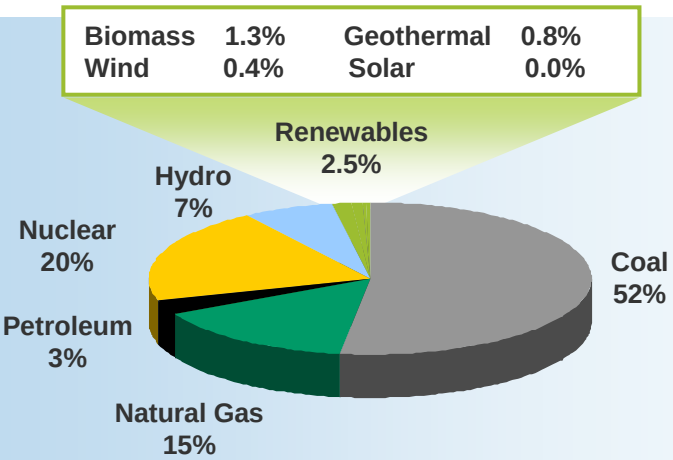


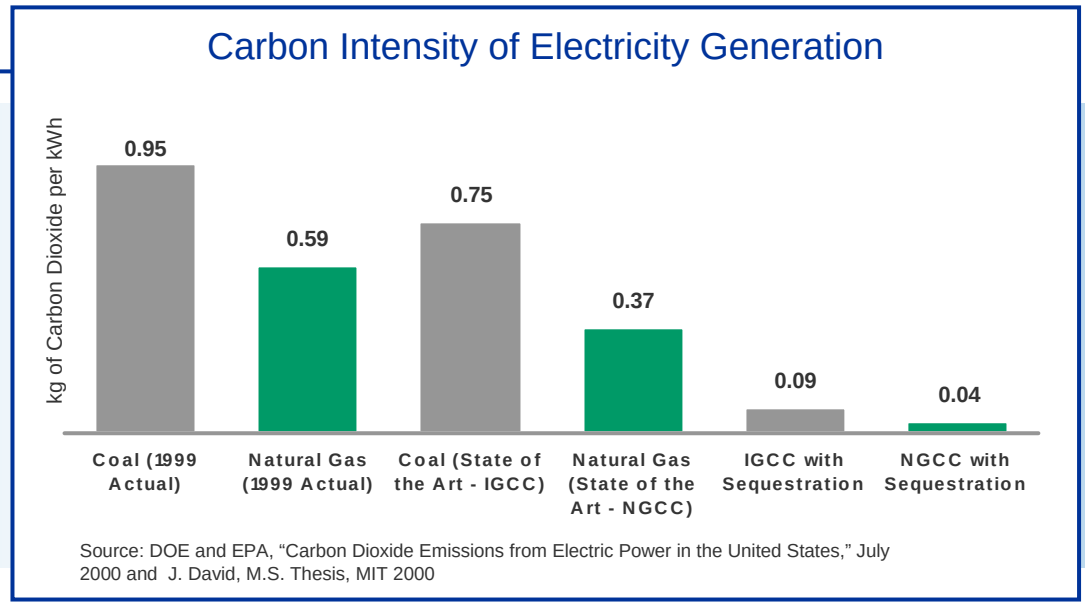
- Improved CAFE Standards
- Incentives for Fuel-Efficient Cars
- Support for Flex-Fuel Vehicles
- Support for California Clean Cars Law (1493) and Its Adoption in Other States
- Renewable Fuel Standards (RFS)
- Low-Carbon Fuels Standard (LCFS)

*Connecticut, Maine, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington

Electricity Generation

CURRENT SITUATION





Source: DOE and EPA, "Carbon Dioxide Emissions from Electric Power in the United States," July 2000 and J. David, M.S. Thesis, MIT 2000

OPPORTUNITIES

Economic Growth

- With Geologic Sequestration, Carbon Dioxide Emissions Can Be Reduced Dramatically in Fossil Fuel Plants at an Estimated Cost of ~ 2.0 Cents/kWh or a Market value of $33/Ton
- Renewables Have the Capacity to Grow to > 20% By 2020 and Are Becoming Cost Competitive with Fossil Fuel Generation (with Sequestration)

Source: EIA; Annual Energy Review 2005 (7/06)

Energy Generation Innovations

SOLAR

Concentrated PV, Geothermal, Solar Farms

- A New Generation of Concentrated Solar-Thermal Power Is Raising Efficiency and Lowering Cost. The Same Turbines Can Burn Natural Gas When the Sun Goes Down
- Solar Photovoltaic (PV) Technology Will Be Cost Competitive Without Subsidy

WIND

Personal Wind Turbines

- Wind Power Can Provide a Significant Fraction of U.S. Renewable Power, Especially if Combined with Storage

BIOMASS

Algae, Carbon Sequestration

- Photosynthesis in Algae Can Sequester CO2 From Power Plants While Producing Biofuel for Transportation and/or Biomass Power Generation

Source: Cleantech 2006

Policies to Support Growth in Cleaner Energy Generation

- Renewable Electricity Standard (RES) – 20% by 2020
  - Would Eliminate the Global Warming Pollution Equivalent of 71 Million Cars
  - Create an Estimated 355,000 New Jobs
  - Reduce Utility Bills by $49 Billion
- Promote Carbon Sequestration
  - Geological
  - Algae or Chemical Scrubbing
- Consistent and Long-Term Incentives

Greenfuel's Algae-Based CO^2 Scrubber Produces Biomass and/or Diesel

Energy Efficiency

CURRENT SITUATION

- Energy Efficiency Is far More Valuable to The Economy than Building New Electrical Generating Capacity

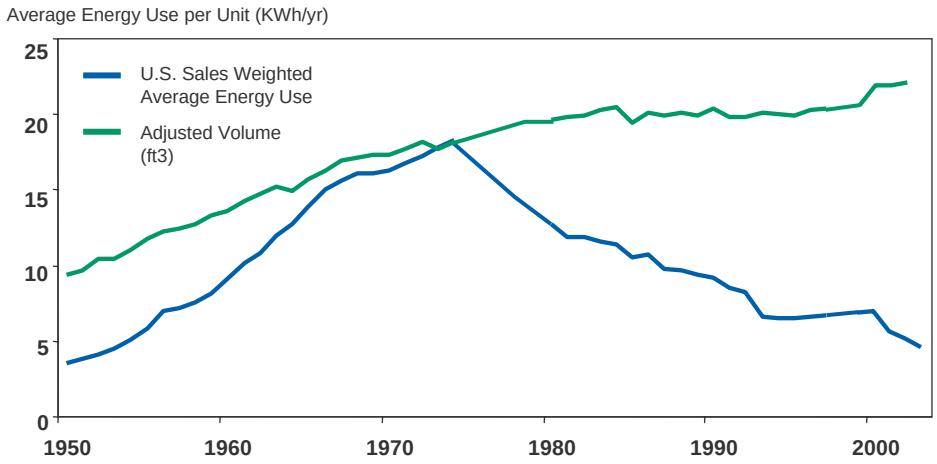
OPPORTUNITIES

COST SAVINGS	■ LEED-Certified Buildings Cost Less to Operate ■ Energy Efficiency Avoids Costly New Power Projects ■ Lower Energy Bills Mean Dollars Saved Can Be Invested Elsewhere in the Economy
BETTER SERVICES	■ More Reliable Grid (Fewer Blackouts) ■ Most Energy Efficiency Technologies and Services Bring Additional Benefits Such as Greater Comfort and More Features
IMPROVED ENVIRONMENT	■ Preserves Natural Resources (Oil, Gas, Coal, etc.) ■ Lessens Pollution ■ Modernizes Facilities and Manufacturing to Improve Our Competitiveness in the Global Economy

The Benefits of Energy Efficiency

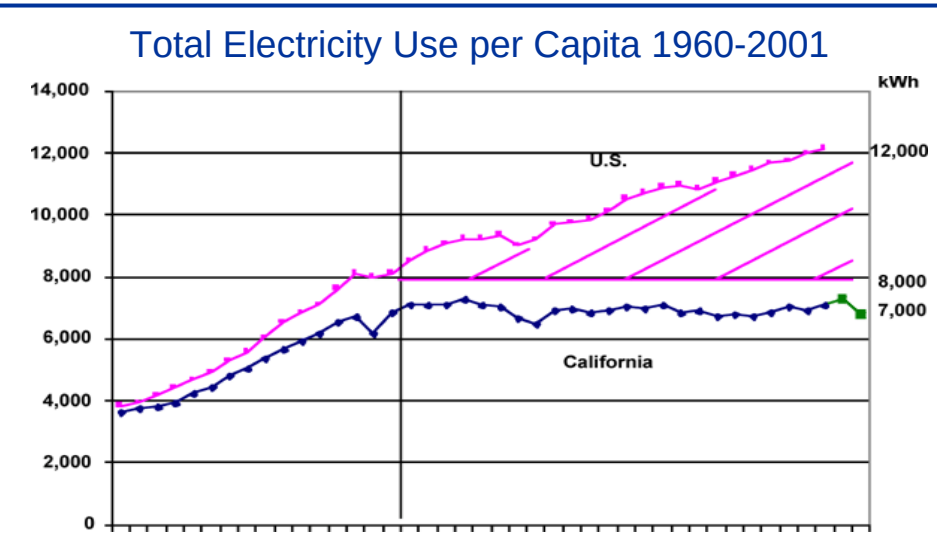
FEDERAL REFRIGERATOR STANDARD

- Has Eliminated the Need for 100-300 Power Plants
- Refrigerators Use 75% Less Electricity



CALIFORNIA EFFICIENCY STANDADS

- Saved $280 per Household per Year
- 50% Less Electricity Use per Capita



Policies to Support Growth in Energy Efficiency Markets

Improved Appliance and Equipment Efficiency Standards

Stronger Building Efficiency Standards

Aligned Utility Incentives

Key Recommendations for Achieving a Green Economy

KEY PROVISIONS FOR CARBON CAP BILL

Carbon Caps

- Long-Term Declining Cap
- Economy-Wide Coverage
- Allowance Trading
- Limited Use of Offsets

TRANSPORTATION

Support the Development of More Efficient Vehicles and Low-Carbon Fuels (LCFS, RFS, CAFE) and Electricity

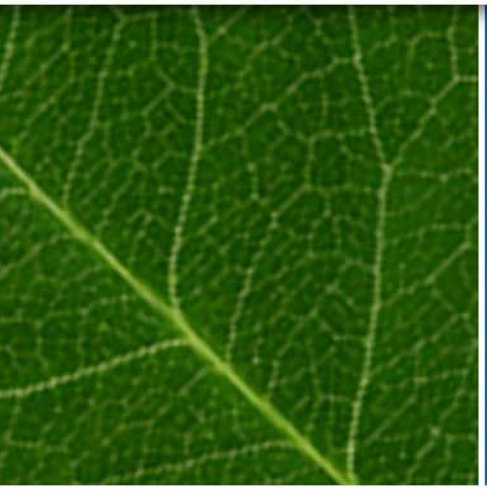
ENERGY GENERATION

Establish National Renewable Electricity Standards (RES) to Increase Investment in Alternative Energy and Carbon Sequestration

ENERGY EFFICIENCY

Ensure the Timely Implementation of Appliance, Equipment and Building Standards

ENVIRONMENTAL
ENTREPRENEURS



The Green Economy

How Federal Policy Can Drive Success