

The Revolution Will Be Funded

*Panama Bartholomy
Advisor to Chairman Douglas
California Energy
Commission*

Economic and Technology
Advancement Advisory Committee

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Sacramento, CA



California Energy Commission

Where We Are Going Today

- Recovery Act
- Formula Programs
- Competitive Programs
- Tax Incentives



American Recovery and Reinvestment Act (ARRA)

- \$787 Billion in funding appropriations and tax relief
- Nearly \$63 billion for energy activities
 - \$42 billion in appropriations
 - \$21 billion in energy tax incentives

www.energy.ca.gov/recovery





ARRA Goals

- Preserve and create jobs and promote economic recovery.
- Assist those most impacted by the recession.
- Provide investments needed to increase economic efficiency by spurring technological advances in science and health.
- Invest in transportation, environmental protection and other infrastructure that will provide long-term economic benefits.
- Stabilize State and local government budgets in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases.

ARRA Energy Appropriations

- Total of \$42 billion
 - \$11.3 billion in formula-based funding
 - Efficiency
 - Renewables
 - Green Community Plans
 - \$30.7 billion in competitive and direct grant, loan and loan guarantee funds
 - Transportation
 - Transmission
 - Renewables
 - Research



**American Recovery
and Reinvestment
Act of 2009
Energy Funding
Implications for
California**



ARRA Formula Energy Appropriations

- Total of \$11.3 billion in formula-based funding
 - \$3.1 billion State Energy Program
 - Energy Commission will receive \$226 million
 - \$3.2 billion Energy Efficiency and Conservation Block Grant Program
 - California local governments are expected to receive over \$300 of million
 - Energy Commission is expected receive \$49 million

ARRA Formula Energy Appropriations

- Total of \$11.3 billion in formula-based funding
 - \$5 billion for Low Income Home Weatherization
 - Community Services and Development Department will receive \$185 million
 - \$300 million nationally for Energy Star Appliance Rebates
 - Energy Commission is expected receive \$30 Million

State Energy Program (SEP)

- Energy Commission is expected to receive \$226 million
 - Traditional SEP appropriations to CA \$1–3 million annually
- Types of activities allowed under SEP
 - Implementing building, industrial and transportation energy efficiency programs
 - Expanding distributed generation, renewable energy and public education programs
 - Conducting any activity to improve energy efficiency, increase use of renewable energy or increase energy efficiency and economic development.

Phase I: SEP Proposed Allocations

1. Department of General Services (DGS) Revolving Loan Program \$25 million
2. Clean Energy Workforce Training \$20 million
3. Energy Conservation Assistance Act (ECAA) Revolving Loan Program \$25 million
4. SEP School and Public Sector Matching Grants up to \$50 million

Phase II: SEP Proposed Allocations

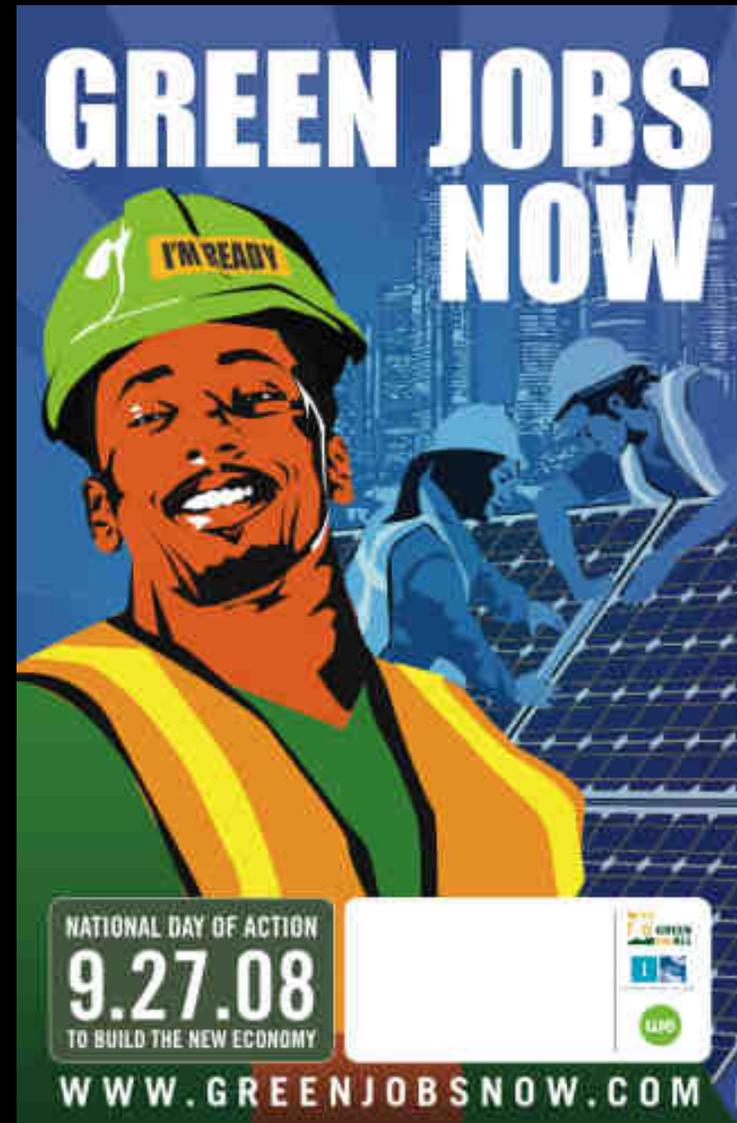
- | | |
|---|-----------------------|
| 5. Clean Energy Systems
Revolving Loan Program | Up to \$35
million |
| 6. Energy Efficiency
Retrofit Programs | Up to \$96
million |
| ● Residential Retrofit | |
| ● Non Residential Retrofit | |
| ● Municipal Financing
Districts | |

State Building Revolving Loan Fund



Clean Energy Workforce Training Program

- Transportation
- Energy and Water Efficiency
- Renewable Energy
- \$65 Million
 - \$20 million in ARRA funds



Energy Conservation Assistance Act (ECAA)

Revolving Loan Program

- \$25 million in low-interest (1%) loans
- For energy efficiency, combined heat and power, demand reduction, water efficiency and generation projects
- Eligible entities include:
 - Public Schools
 - Public Hospitals
 - Public Care Institutions
 - Units of Local Government
- Maximum Loan Amount is \$3 million



School and Public Sector Matching Grants

- SEP-funded grants will be available to public schools, colleges and other public agencies
- Recipients must match grant funds with Energy Conservation Assistance Act Loans



Clean Energy Systems

- Targeting the private sector with up to \$35 million in revolving loans
- Focused on the following technologies:
 - Distributed Generation
 - Combined Heat and Power
 - Bioenergy
 - New Energy Manufacturing Facilities



Building Energy Efficiency Barriers

- Building owners lack capital for improvements
- Lack of market-tested standardized building rating system (residential less so)
- Fragmented existing building stock requires complex solutions and is difficult to scale
- Widespread lack of awareness of costs and benefits
- Gaps in knowledge, skills, and experience of workforce limit scale
- Lack of coordination between existing programs

Municipal Financing District Program



California Comprehensive Residential Building Retrofit Program



Municipal and Commercial Building Targeted Measure Retrofit Program



SEP Efficiency Retrofits Anticipated Schedule

08/08/09 - 8/20/09	Revise final guidelines
8/21/09 - 9/21/09	Post final guidelines for public review, simultaneously develop solicitation from guidelines
9/30/09	Issue solicitation for bids
10/30/09	Proposals due
11/30/09	Announce winners
12/01/09 - 1/31/10	Issue awards to winning bidders

Energy Efficiency and Conservation Block Grant

- \$3.2 billion nationally
 - 68% to local governments (directly to cities > 30,000 and counties > 200,000 population)
 - 28% to state energy offices
 - 2% to tribes
 - 2% competitive grants
- California local governments are expected to receive over \$302 million directly
- Energy Commission is expected to receive \$49 million



Energy Efficiency and Conservation Block Grant

- Assist eligible entities in implementing energy efficiency and conservation strategies
 - to reduce pollution emissions from fossil fuels created as a result of activities within the jurisdictions of eligible entities;
 - to reduce total energy use; and
 - to improve energy efficiency in the transportation, building, and other appropriate sectors.

Energy Efficiency and Conservation Block Grant

- Energy Commission is expected to receive around \$49 million
 - 60% of the funds will be distributed to small municipalities through a block grant program
 - 40% will be placed into the State Energy Program and spent at the Energy Commission's discretion
- Department of Energy released guidelines March 26



EECBG

Small City/County Pass-Through Funds

- Allocation based on a per capita formula
- Base allocation of \$5.00 per person
- Base allocation increased by unemployment rate
 - $(1 + \text{Unemployment rate}) \times \5.00
- Establishes minimum funding levels:
 - \$25,000 per City
 - \$50,000 per County
- Allows for energy efficiency projects or direct equipment purchases
- Allocates approximately 70% of EECBG (ARRA requires a minimum of 60%)

EECBG Small Jurisdiction Funding Anticipated Schedule

08/07/2009 – 09/09/2009	Post final Guidelines for public review, simultaneously develop solicitation and reporting requirements from Guidelines
09/17/2009	Issue solicitation packages for grants
9/30/2009	US DOE approval expected
10/1/2009 – 2/15/2010	Grants applications accepted
10/15/2009 – 03/15/2010	Process Grant Applications
11/15/2000 – 03/31/2010	Issue Grants

DOE Weatherization Assistance Program (\$5 Billion Nationally, \$185 million for CA)

- Administered by Community Services and Development Department for over 30 years
- Purpose of the DOE WAP is to:
 - increase the energy efficiency of dwellings owned or occupied by low-income Californians
 - reduce total energy expenditures
 - improve health and safety
- Focus on vulnerable population



Energy Efficient Appliance Rebate Program and Energy Star Recovery Funding

- Authorized in Energy Policy Act of 2005
- \$300 million available nationwide
 - Estimated \$35 million to California Energy Commission
- Provides rebates to residential consumers for purchase of Energy Star products to replace used appliances of the same type
- Rebates shall be used to supplement, not supplant existing funds

ARRA non-Formula Energy Appropriations

- Total of \$30.7 billion in competitive and direct grant, loan and loan guarantee funds



ARRA non-Formula Energy Appropriations

- \$11 billion for Transmission
 - \$4.5 billion for competitive smart grid demonstration projects
 - \$3.25 billion for Western Area Power Authority
 - \$3.25 billion for Bonneville Power Authority



ARRA non-Formula Energy Appropriations

- \$1 billion for Transportation
 - \$300 million Clean Cities
 - \$300 million Diesel Emissions Reductions
 - \$400 million Electric Drive Vehicles



ARRA non-Formula Energy Appropriations – cont.

- \$6 billion for Renewable Energy
 - Renewable Energy Loan Guarantees
 - Must commence construction prior to Sept. 30, 2011



ARRA non-Formula Energy Appropriations - cont.

- \$8.4 billion for Research
 - Clean Fossil Energy, Energy Efficiency and Renewable Energy Research, Advanced Battery Research

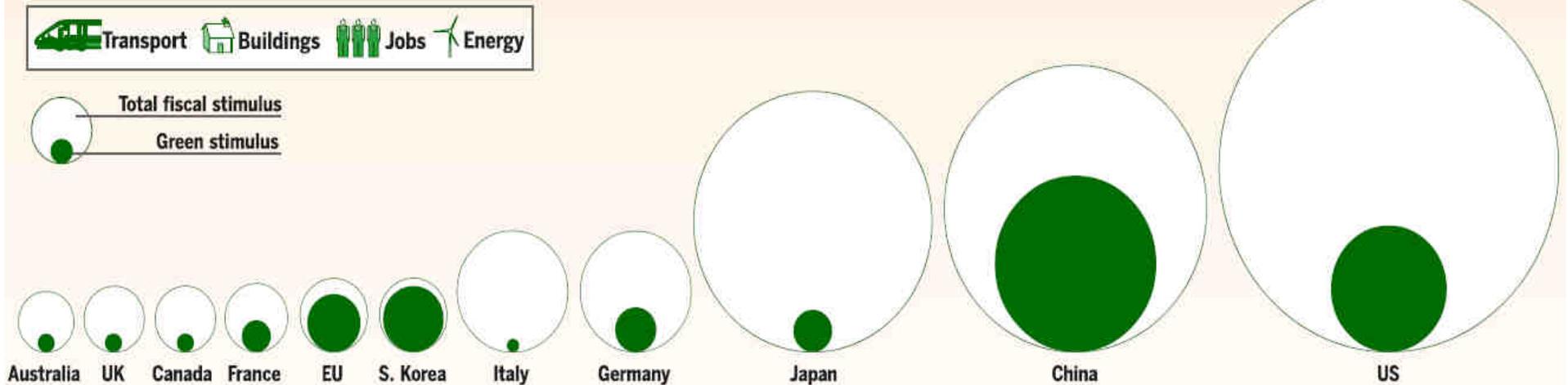


ARRA Energy Tax Incentives

- Total of \$21 billion in tax incentives for energy
 - \$13 billion in renewable energy tax credits
 - \$1.6 billion Clean Renewable Energy Bonds
 - \$2.4 billion Qualified Energy Conservation Bonds
 - \$2 billion plug-in electric vehicle

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Planning



US



Amount spent on fiscal stimulus: **\$972bn**

Amount spent on green measures: **\$112.3bn**

The first US stimulus package, approved in October 2008, brought the green agenda to the fore. It contained \$18.2bn in tax cuts and credits for clean energy, a \$9.45bn extension of tax credits on wind and solar power, and \$2bn in spending on carbon capture and storage.

However, the second package, passed in February 2009, cut a number of expected green features and resulted in an estimated \$57bn loss in environmental spending.

Congress granted \$22.5bn in incentives for renewable energy, including further extensions to tax credits on wind, biomass and geothermal energy. There was also investment in energy efficiency, with \$52bn for projects such as modernising the electricity grid. \$10bn was set aside for public transport.

The combined effect of the investments is expected to create around 2.5m green jobs.

Thank You!

**Panama
Bartholomy
(916) 654-4896
pbarthol@energy
.state.ca.us**

