American Recovery and Reinvestment Act of 2009

Synopsis of Energy Provisions and Incentives

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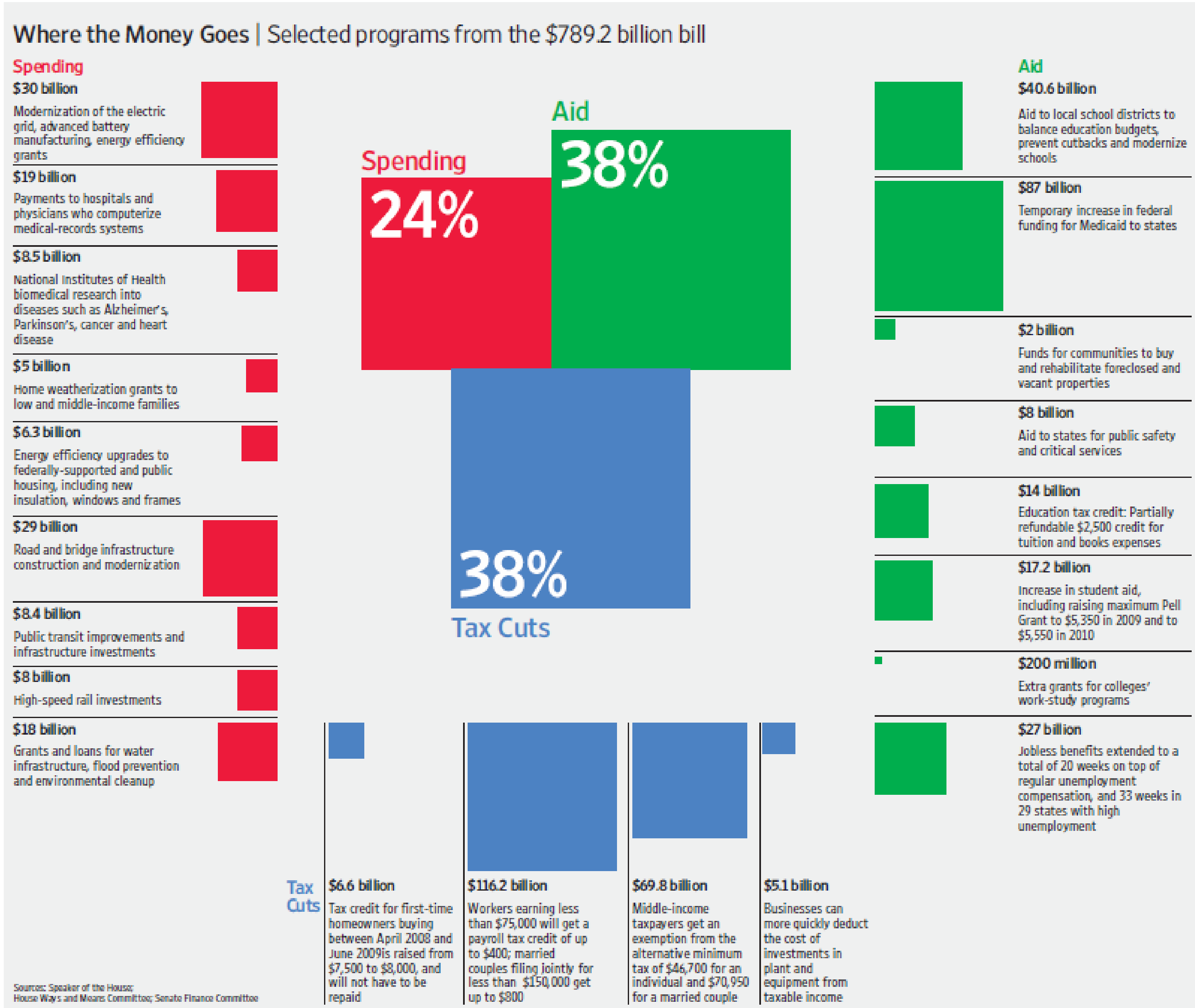

Where the Money Goes | Selected programs from the $789.2 billion bill
Spending
$30 billion
Modernization of the electric grid, advanced battery manufacturing, energy efficiency grants
$19 billion
Payments to hospitals and physicians who computerize medical-records systems
$8.5 billion
National Institutes of Health biomedical research into diseases such as Alzheimer's, Parkinson's, cancer and heart disease
$5 billion
Home weatherization grants to low and middle-income families
$6.3 billion
Energy efficiency upgrades to federally-supported and public housing, including new insulation, windows and frames
$29 billion
Road and bridge infrastructure construction and modernization
$8.4 billion
Public transit improvements and infrastructure investments
$8 billion
High-speed rail investments
$18 billion
Grants and loans for water infrastructure, flood prevention and environmental cleanup
Aid
38%
Spending
24%
38%
Tax Cuts
Aid
$40.6 billion
Aid to local school districts to balance education budgets, prevent cutbacks and modernize schools
$87 billion
Temporary increase in federal funding for Medicaid to states
$2 billion
Funds for communities to buy and rehabilitate foreclosed and vacant properties
$8 billion
Aid to states for public safety and critical services
$14 billion
Education tax credit: Partially refundable $2,500 credit for tuition and books expenses
$17.2 billion
Increase in student aid, including raising maximum Pell Grant to $5,350 in 2009 and to $5,550 in 2010
$200 million
Extra grants for colleges' work-study programs
$27 billion
Jobless benefits extended to a total of 20 weeks on top of regular unemployment compensation, and 33 weeks in 29 states with high unemployment
Tax Cuts
$6.6 billion
Tax credit for first-time homeowners buying between April 2008 and June 2009is raised from $7,500 to $8,000, and will not have to be repaid
$116.2 billion
Workers earning less than $75,000 will get a payroll tax credit of up to $400; married couples filing jointly for less than $150,000 get up to $800
$69.8 billion
Middle-income taxpayers get an exemption from the alternative minimum tax of $46,700 for an individual and $70,950 for a married couple
$5.1 billion
Businesses can more quickly deduct the cost of investments in plant and equipment from taxable income
Sources: Speaker of the House; House Ways and Means Committee; Senate Finance Committee

ARRA—aka, The Stimulus Bill

- American Recovery and Reinvestment Act of 2009 (the “ARRA”)—signed into law on February 17, 2009—
  - provides substantial new appropriations for existing programs administered by the Department of Energy (“DOE”),
  - makes changes in eligibility criteria for existing programs, and
  - establishes new programs.
- Appropriations for existing programs will enable DOE to commit the appropriated monies without having to promulgate new rulemaking.
- New programs <u>may require</u> DOE to promulgate rulemaking.

Energy Efficiency and Renewable Energy—$16.8B

- $3.2B for energy efficiency and conservation block grants to states and local governments for <u>broadly defined programs</u> to promote more efficient energy use. Originally authorized by provisions in the Energy Independence and Security Act ("EISA").

- $5.0B for weatherization of dwellings owned or occupied by low income persons. Originally authorized by provisions in the Energy Conservation and Production Act (ECPA).

- $3.1B for State Energy Programs to develop and implement state energy conservation programs. Originally authorized under the Energy Policy and Conservation Act (EPCA).

- $2.0B for grants to manufacture advanced batteries and components.

Electricity Delivery and Energy Reliability—$4.5B

- $4.5B for grants under provisions of EISA for ≤ 50% of cost for qualified smart grid demonstration projects.
  - **Qualified projects:** a) support delivery and reliability measures and b) serve to modernize the electric grid, including demand responsive (DR) equipment.
  - DOE will accept applications related to a) improving security and rehabilitation of energy infrastructure and b) energy storage research, development, and deployment.
- DOE must use $80M—in consultation with FERC—to analyze future electricity demand and related transmission requirements.
  - Smart grid projects (including both transmission and advanced metering) are to be
    - promoted in urban, suburban, and rural areas, and
    - applicable to both tax-exempt funded and investor-owned entities.

Innovative Technology Loan Guarantee Program—$6B

- **Existing Loan Guarantee Program—Title XVII of Energy Policy Act of 2005.** Created loan guarantee program to support the deployment of innovative, clean energy technologies—including renewable energy, transmission and advanced coal-based and nuclear technologies—that "reduce, avoid or sequester carbon dioxide and other air emissions."
  - Up to $42.5 billion in loan guarantees are currently authorized.
  - Credit subsidy cost of the guarantees is to be self-funded by borrowers.

Innovative Technology Loan Guarantee Program—$6B

- $6B for innovative technology loan guarantees under a new §1705 of the Energy Policy Act of 2005.
- ARRA increases maximum level of funding from 20% to 50% for qualifying advanced electric grid technology subject to the following:
  - DOE must, within 60 days of enactment, through a notice of intent and subsequent solicitation, take action to implement new rules.
  - DOE must establish specific procedures by which applicants can obtain grants.
  - The new rules must require that funded demonstration projects utilize open protocols and standards (including Internet-based protocols and standards) if available and appropriate.
- Loan guarantees to promote rapid deployment of renewable energy and electric transmission will be provided only to “shovel ready” projects that commence construction no later than September 9, 2011.

Innovative Technology Loan Guarantee Program—$6B

- Funds are available for three types of projects:
  A. Renewable energy systems that generate electricity or thermal energy, including incremental hydroelectric projects, and facilities that manufacture related components.
  B. Electric power transmission systems, including upgrading and projects to install new conductors on existing lines.
  C. "Leading edge" bio-fuel projects performing at pilot or demonstration stage that
    - are likely to become commercial technologies, and
    - will produce transportation fuels that substantially reduce life cycle GHG emissions as compared to alternative transportation fuels.
- DOE must <u>condition</u> grant of loan guarantees <u>for electric transmission </u>on
  – an evaluation of project viability <u>without</u> the loan guarantee,
  – the availability of other federal/state incentives,
  – the importance of the project in meeting reliability requirements, and
  – the effect on state/regional environmental (including climate change) and energy goals.

ARRA—Other Appropriation and Policy Provisions

- **New Programs w/ARRA Appropriations**:
  - Fossil Energy Research and Development—$3.4B.
  - Science—$1.6B (grants). No directive on use of funds.
- **Increased Borrowing Authority** for Federal Power Marketing Agencies.
  - $6.5B for both the Bonneville Power Administration ("BPA") and the Western Area Power Administration ("WAPA").
  - WAPA will receive $3.25B "…to construct transmission to deliver renewable energy." No such language was linked with BPA authorization ($3.25B).

ARRA—Other Appropriation and Policy Provisions

- ARRA directs modifications to the 2009 National Electric Transmission Study; biennial study of electric grid congestion specified in EPAct 2005.
- DOE must analyze:
  - the potential sources of renewable energy that are constrained in accessing appropriate markets by lack of adequate transmission.
  - the extent that legal challenges at state/federal level have delayed construction of transmission needed to access renewable energy.
  - the assumptions and projections made, including those related to energy efficiency improvements in each load center, the location and type of new generation capacity, and the deployment of distributed generation.

Renewable Energy Tax Provisions

ARRA modifies existing tax incentives and establishes a program to make optional grants available in lieu of tax credits for certain projects.

•**Extension of Placed-in-Service Deadlines**. ARRA extends by three years PIS deadlines for claiming PTCs (§45). New deadlines:

- December 31, 2012—wind facilities
- December 31, 2013—biomass (closed-loop and open-loop), geothermal, landfill gas, waste-to-energy, certain hydropower, and marine and hydrokinetic facilities (collectively, "renewable energy facilities").

•**CREBs Bonds**. ARRA authorizes issuance of additional $1.6B of new, clean renewable energy bonds to finance renewable energy facilities owned by public power providers, governmental bodies, and cooperative electric companies.

Renewable Energy Tax Provisions

- **Optional Investment Credit for Certain Facilities*.***
  - Taxpayer may irrevocably elect to have qualified property of certain qualified facilities treated as “energy property” eligible for 30% ITC under §48 instead of PTC.
    - Applies to all PTC facilities, *except Indian coal,* refined coal, and solar facilities.
    - Does not apply if any section 45 credits have been taken.
    - Applies only to tangible personal property, *not* buildings or their structural components.
  - Under limited circumstances, ITCs may receive certain progress expenditures when qualified property has a long construction period.
  - Limitations on “carry backs” and “carry forwards” did not change; unused credits may be carried back one year and forward 20 years.
- **ITC for Energy Property.**
  - ARRA repealed prior-law limit that reduced allowable ITCs for energy property that was financed with subsidized energy financing or private activity bonds.
  - Existing ITC credit cap of $4,000/yr for qualified small wind energy property is eliminated.

Renewable Energy Tax Provisions

- **Optional Grants for Certain Facilities**. ARRA makes grants available in lieu of PTCs or ITCs for property PIS during 2009-2010.
  - Grants will be available for property PIS after 2010 and before the applicable PTC or ITC PIS deadlines if construction begins during 2009 or 2010.
  - Grants are 30% of "property's basis" for eligible property except qualified microturbines, CHP, and geothermal heat pump property, where it is 10% of basis.
  - Property eligible for grants must be tangible property, not including buildings or structural components, for which depreciation is allowable; property must be used as an integral part of the qualified facility.
  - Tax-exempt persons, including government-owned utilities and cooperatives, are ineligible for grants. Partnerships are ineligible if any partner is "tax-exempt."
  - Grants are excludible from gross income, but "property's basis"—to compute depreciation (MACRS)—will be reduced by 50% of grant amount.
  - Property that receives a grant will be ineligible for PTCs or ITCs.
  - Grant program administered by Treasury Department (and not DOE). Treasury required to extend grant within 60 days from the date taxpayer applies or date the property is PIS, provided the taxpayer applies for grant before October 1, 2011.

Clean Energy Tax Provisions

- **Qualified Energy Conservation (QEC) Bonds.**
  - ARRA authorizes additional $2.4B of qualified energy conservation bonds.
  - Provision clarifies QEC bonds can be issued to finance retrofits of existing private buildings through
  - loans and/or grants to individual homeowners or businesses, or
  - through repayment mechanisms such as periodic fees on utility bills that approximate the energy savings.
  - Such QEC bonds <u>will not be private activity bonds</u> wrt requirement that 70% of allocations within state/local government not be for private activity bonds.
- **Credit for Investment in Advanced Energy Property.**
  - ARRA provides new 30% credit for investments in certain depreciable property used in a qualified advanced energy manufacturing project. Credits available only for projects certified by Treasury (in consultation with Sec. of Energy) using specified selection criteria.
  - Applications for certification must be submitted within two-year period from date Treasury establishes the program. Treasury may allocate $2.3B in credits.
  - After certification, taxpayer has five years for PIS. Treasury may reallocate unused credits.

Clean Energy Tax Provisions

- **Credit for Investment in Advanced Energy Property (cont'd).**
  – A qualified advanced energy manufacturing project is a project that re-equips, expands, or establishes a manufacturing facility for the production of:
    - Property designed to be used to produce energy from the sun, wind, or geothermal deposits, or other renewable resources
    - Fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles
    - Electric grids to support transmission of intermittent resources of renewable energy, including storage
    - Property designed to capture and sequester CO_2
    - Property designed to refine or blend renewable fuels (but not fossil fuels) or to produce energy conservation technologies (including energy lighting or smart grid technologies)
    - Property designed to manufacture certain vehicles, including new qualified plug-in electric drive motor vehicles, and components designed especially for use with such vehicles.

Clean Energy Tax Provisions

- **Modification of Carbon Capture Credit***.* Credit provision adopted in 2008—which provided a credit of $10/mt of CO_2 captured and used as a tertiary injectant in enhanced oil or gas recovery (EOR) projects—amended to require that CO_2 must be sequestered in permanent geologic storage to qualify for the credit. A “secure geological storage” includes storage in oil and gas reservoirs.
- **Alternative Fuel Refueling Property***.*
  - ARRA increases the credit for alternative fuel refueling property placed in service in 2009-2010 to $200,000 for qualified hydrogen refueling property and $50,000 for other refueling property.
  - For non-business property, the maximum credit is increased to $2,000. The credit rate for non-hydrogen refueling property is increased “temporarily” to 50 percent.

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