



The Stella Group, Ltd.

The Stella Group, Ltd.. is a strategic marketing and policy firm for clean distributed energy users and companies which include advanced batteries and controls, energy efficiency, fuel cells, heat engines, minigeneration, marine power (freeflow, tidal, wave), modular biomass, photovoltaics, small wind, and solar thermal (including daylighting, water heating, industrial preheat, building air-conditioning, and electric power generation). The Stella Group, Ltd. blends distributed energy technologies, aggregates financing (including leasing), with a focus on system standardization. Scott Sklar serves as Steering Committee Chair of the Sustainable Energy Coalition, composed of the renewable energy and energy efficiency trade associations and analytical groups, and sits on the national Boards of Directors of the non-profit Business Council for Sustainable Energy, Renewable Energy Policy Project, and The Solar Foundation. Sklar is an Adjunct Professor at The George Washington University and The American University, and was appointed in 2010 to the Department of Commerce EE/RE Advisory Committee.

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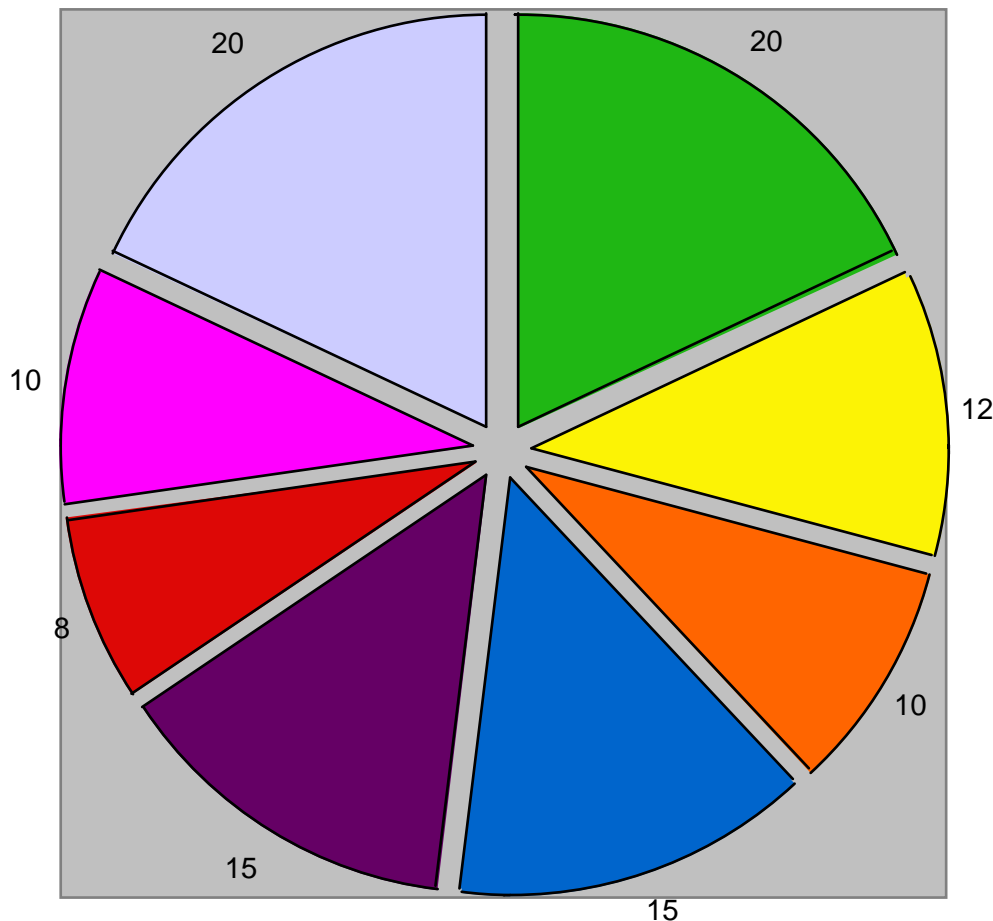
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Clean Energy Investment Reports

1. A new report released by **The Pew Charitable Trust:**
 - Globally, 2010 clean energy finance and investments grew by 30 percent to a record \$243 billion.
 - The US received \$34 billion in equity last year, a 51 percent increase from 2009.
 - However, the gap with China, which attracted a record \$54.4 billion, continues to widen.
 - Germany also attracted more money than the U.S. with \$41.2 billion, claiming the number two spot, up from third the previous year.

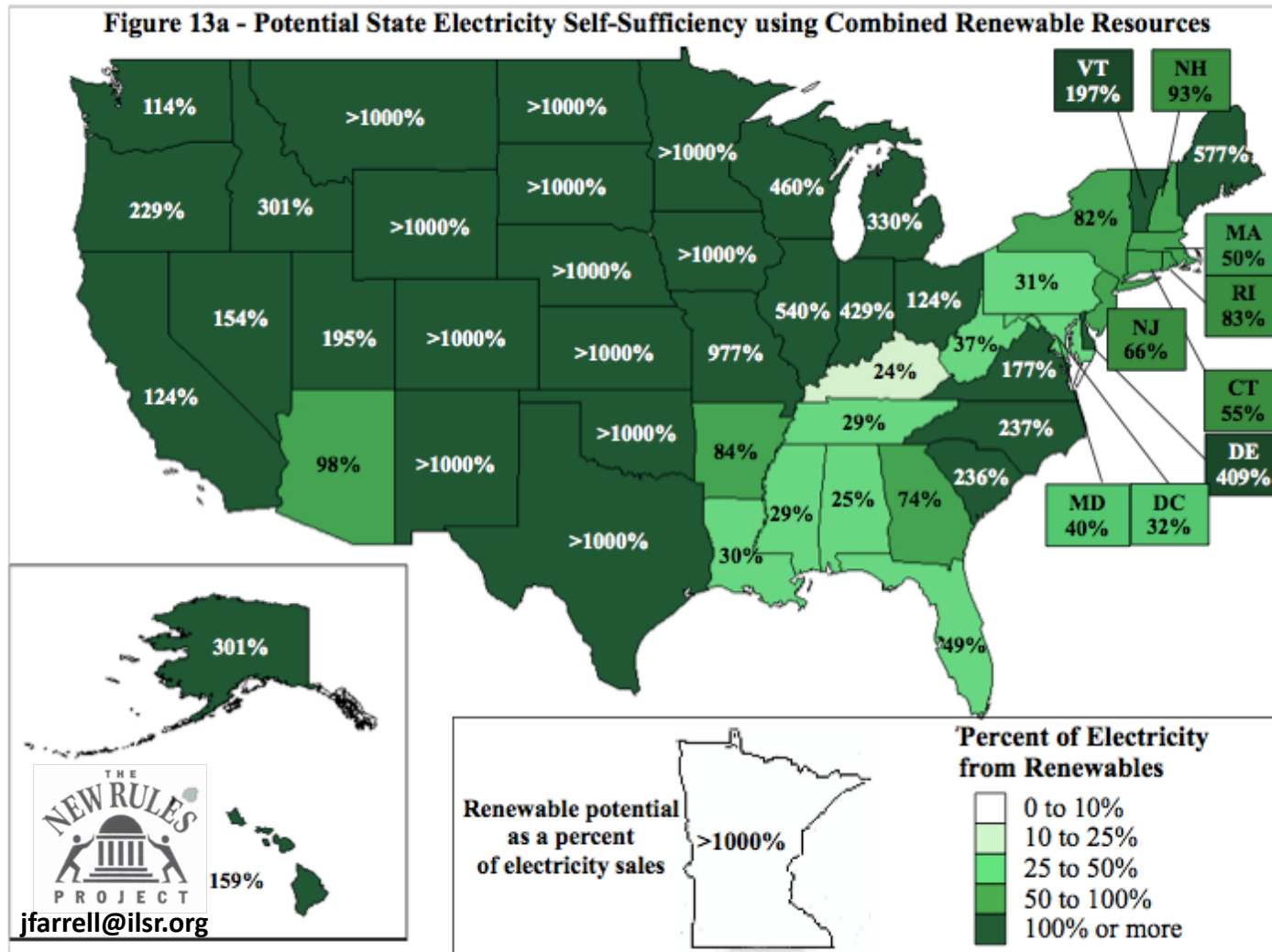
2. Energy Investments 2009 'Investments in renewable energy **increased from \$39.24 billion in 2001 to \$336.78 billion in 2009** at a CAGR of 30.8% during this period. (5\11\10 Bloomberg)

Percentage of Clean Energy in 21st Century



- **20% Biomass Power**
- **12% Building RE: GCHP/ST**
- **10% Geothermal**
- **15% Solar-Concentrated Sol**
- **15% Solar-Distributed PV/S**
- **8% Waste Heat**
- **10% Water Energy**
- **20% Wind Energy**

32 States can be Self-Sufficient



Electrical Generation from Non-Hydro Renewables Increases by 55% Over the Past Three Years

U.S. Energy Information Administration, February 29, 2012

(<http://www.eia.gov/electricity/monthly>)

- The latest issue of EIA's "Electric Power Monthly," with data through December 31, 2011, reveals that net electrical generation by non-hydro renewable energy sources (i.e., biomass, geo-thermal, solar, wind) grew by 54.6% during the past three years.
- During the same period, conventional hydropower expanded by 27.6%. Combined, electrical output from renewable energy sources was 36.5% greater for calendar year 2011 than it was for calendar year 2008.
- By comparison, between January 1, 2009 and December 31, 2011, natural gas used in electrical generation grew by 15.1% while nuclear and coal dropped by 2.0% and 12.7% respectively.
- During 2011, hydro and non-hydro renewables combined accounted for 12.66% of net electrical generation compared to 10.36% in 2010. Comparing the 12-months of 2011 against the same time period in 2010, solar grew by 49.6%, wind by 26.5%, hydropower by 24.9%, geothermal by 9.7%, and biomass by 1.1%.
- For all of 2011, non-hydro renewables accounted for 4.75% of net electrical generation while conventional hydropower accounted for 7.91%. However, non-hydro renewables have been growing rapidly and for the last quarter of 2011, they accounted for 5.5% of net U.S. electrical generation.
- Among the non-hydro renewables, wind accounted for 61.4% of net electrical generation in 2011, followed by biomass (29.1%), geothermal (8.6%), and solar (0.9%). =====

U.S. Renewable Energy Production Grows 27% Over the Past Three Years

U.S. Energy Information Administration, February 27, 2012

(<http://www.eia.gov/totalenergy/data/monthly/index.cfm>)

- The latest issue of EIA's "Monthly Energy Review," with data through November 30, 2011, reveals that over the past three years domestic energy production from renewable sources (i.e., biofuels/biomass, geo-thermal, solar, water, wind) has increased by roughly 26.9%.
- By comparison domestic oil production increased by 13.7% and natural gas production grew by 13.4% while nuclear power decreased by 2.8% and coal production plummeted by 7.3%.
- Renewables accounted for 11.76% of domestic energy production for the first eleven months of 2011 compared to 10.83% for the same period in 2010. In terms of actual production, renewables in 2011 increased 13.4% over their 2010 level.
- Hydropower accounted for 34.9% of renewable energy production in 2011 followed by biomass (26.6%), biofuels (22.0%), wind (12.7%), geothermal (2.4%), and solar (1.3%). =====

Water Energy Request Decrease

Energy Efficiency and Renewable Energy Overview

Appropriation Summary by Program

Energy Efficiency and Renewable Energy (EERE) Water Power

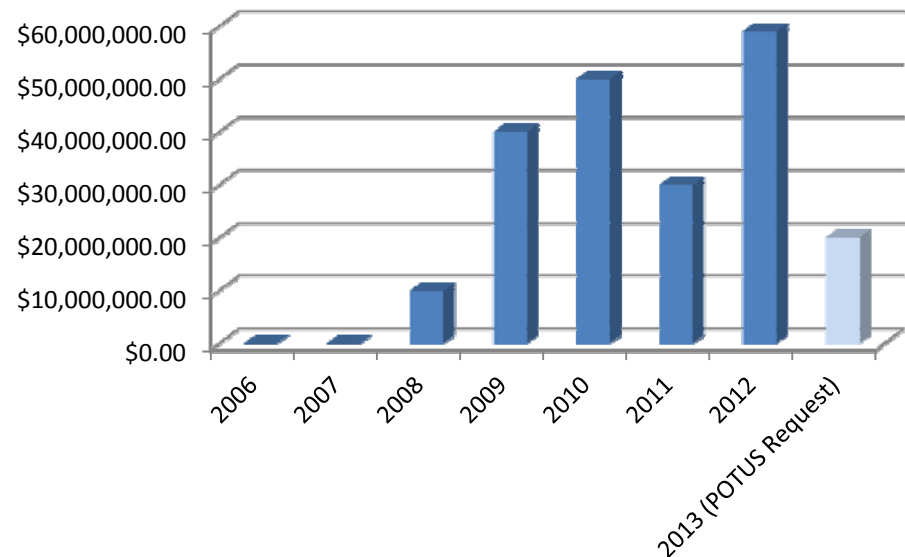
(Dollars in Thousands)

FY'11 Current	FY'12Enacted	FY'13 Request
\$ 29,201	\$ 58,787	\$20,000

Hydropower R&D

- DOE's Water Power Program
 - Conventional
 - Improve efficiency and environmental performance
 - Reduce small hydro cost
 - Demonstrate new pumped storage technology and grid benefits
 - Marine and Hydrokinetic (MHK)
 - Demonstrate technology viability
 - Reduce technology costs
 - Address environmental challenges
- Budget History Highlights
 - FY13 President's Request: \$20 million (66% cut)
 - FY12 Enacted: \$59 million
 - FY06-07 – Program zeroed out

Water Power Program Budget History



Hydrogen & Fuel Cell Technologies

Energy Efficiency and Renewable Energy Overview

Appropriation Summary by Program

Energy Efficiency and Renewable Energy (EERE)

Hydrogen & Fuel Cell Technologies

(Dollars in Thousands)

FY'11 Current	FY'12Enacted	FY'13 Request
\$ 95,847	\$ 103,624	\$ 80,000

US Position in Energy

Bill Gates: The lack of energy funding is crazy

By [Katie Fehrenbacher](#) Feb. 28, 2012, 8:09am PT

Bill Gates told an audience of energy entrepreneurs, scientists and investors at the ARPA-E energy conference on Tuesday that “It’s crazy how little we’re funding energy.” Energy research is underfunded by a factor of two, Gates said, referring to the amount of current U.S. government investment in energy research.

But the high failure rate is why we “literally need thousands of these companies to try this,” in order to get a dramatic solution, said Gates. Gates also noted that he thought the IT revolution has “morphed people’s minds” about how fast progress can be delivered. The energy revolution will be much slower than the IT revolution, said Gates.

Gates has expressed similar sentiments before. He is part of the [American Energy Innovation Council](#), which about two years ago called for a [government investment](#) of \$16 billion per year into basic research to deliver energy innovation. Since that foundation launched, he has said that he has been [stunned](#) that the government hasn’t been able to rise to the occasion.

SOURCE: <http://gigaom.com/cleantech/bill-gates-the-lack-of-energy-funding-is-crazy/>