

Workforce Implications of the Draft State Energy Strategy

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BACKGROUND (Dan to fill in the gaps ...)

- ARRA workforce pots ... (... the ____ pot requires submittal of a “state energy workforce plan” that reflects the “state energy plan.” ...)
- At the request of the Governor, the Department of Commerce is developing a state energy policy to describe the preferred clean energy future for the state. The policy will be followed by an implementation plan with the steps to transition to that future. Both the policy and the implementation plan will build on Washington State’s existing and significant commitment to energy efficiency and renewable energy. While work on the strategy has just begun, the state is using the draft strategy to help prioritize our efforts to secure Recovery Act stimulus funding related to energy.
- Washington State’s Green Economy ... (we can build on the goals and strategy in this document ...)
- Washington WORKS ... (... how to get there?? ...)
- Evergreen Jobs Leadership Team ...

ENERGY FUTURE

Initial Conclusions from the draft State Energy Strategy

1. Washington has a wide-ranging and progressive energy policy related to energy efficiency (building codes, green public building requirements, cost effective conservation requirements for electric utilities) and renewable energy (renewable standards for electric utilities, renewable fuel standards, tax incentives). These provide both real progress to date and a strong foundation for next steps towards a clean energy future.
2. Our best opportunity for improving our energy independence and reducing our greenhouse gas emissions is to transition our energy use from fossil fuels to the electrical grid (e.g., through electric transportation).
3. To accomplish this, we will need to expand the grid with clean energy generation, better transmission and more flexible end-use (e.g., electric cars and smart homes/appliances).
4. We will need to substantially improve our energy use efficiency (buildings, utility systems, commercial use, etc.). Efficiency is key to maintaining affordable energy, to sustaining the work after ARRA funds lapse (efficiency pays for itself), and to buying time for clean energy to scale up.

State Priorities for Energy Stimulus Funds

- Energy efficiency funding – for projects that generate jobs and provide long-term return on investment
- Smart grid – to prepare the electrical grid to integrate clean generation and manage higher demand
- Renewable energy generation – to produce the clean electrical generation needed to transition from fossil fuels, and to produce biofuels to replace fossil fuel use

- Electric transportation – to move light duty vehicles from fossil fuels to electricity and other alternative fuels

ENERGY WORKFORCE NEEDS

Near-Term (1-5 years)

- Washington State already has a large and capable energy efficiency workforce, with many state jobs. Our existing policies will continue the growth in demand for a skilled energy efficiency workforce.
- We need to invest in innovation, R&D and business development for clean energy (wind, solar, bioenergy, geothermal, ocean).
- We need to improve the grid – better automation and adequate transmission lines, and prepare to integrate intermittent sources (e.g., wind) and provide two-way information between supply (utility) and demand (customer)
- And we need to expand our innovation and learning capacity for both efficiency and clean energy (R&D, new technology demonstration and deployment, both academic and worker training)

Near-Term Workforce Needs

- 1-2 year programs focused on training and development of the energy efficiency workforce
- 4-year programs to educate the smart grid software developers, transmission engineers, green building architects, clean energy systems designers

Longer-Term (5-10 years)

- We will scale up smart demand – electric cars and plug-in infrastructure, smart homes and appliances, clean energy generation/transmission
- We will demonstrate, deploy, market/export the next generation of energy efficiency technologies

Long-Term Workforce Needs

- We can expand the clean energy workforce – in significant part by offering new skills to existing workers (e.g., an auto mechanic that can work on electric cars, and the weatherization technician that can work on a smart home hot water heater)
- Even with significant and ongoing investment, there will be lots of cost-effective energy efficiency work for at least 10 years.