



Office of Energy Development



Energy actions in Utah, and potential collaboration with INL

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Utah is Four Cornerstones Strong



- **Governor Herbert's Priorities**

- Education
- **Energy**
- Economic Development
- Self-Determination

“No other state can offer what Utah can. We are uniquely positioned in the Western Energy Corridor. Utah has a rich abundance of diverse natural resources, both in terms of traditional fuels, and renewable and alternative energies.”

~Governor Gary R. Herbert

Governor Gary R. Herbert
Energy Initiatives & Imperatives
Utah's 10-Year Strategic
Energy Plan



Call to Action: Ensure access to affordable, reliable and sustainable energy by producing 25% more electrical energy than we consume by 2020.

Objective 1: Advocate responsible energy resource development.

Objective 2: Promote policies and practices for improved air quality.

Objective 3: Aggressively pursue technology innovations in energy efficiency and development.

Guiding Principles



1. Free Market Development of All Resources

- Legislative and Regulatory Oversight

2. Minimize and Mitigate Impacts

- Human, Environmental and Wildlife Habitat

3. Living and Evolving Document

- Best Practices Public Discussion with Stakeholders

4. Utility Costs

- Price Stability and Relative Affordability

5. Energy Independence

- Export and Economic Expansion Opportunities

Recommendations



1. Establish an Energy Office (HB475)

- Consolidate existing energy functions
- Form State Energy Advisory Committee

2. Develop Plans to Keep Public Lands Open

- Coordinate efforts and leverage partnerships
- Utilize the Governor's Balanced Resource Council

Recommendations (cont.)



3. Enhance Technology Advancement

- Develop a Research Triangle
- Leverage INL for clean fossil fuels

4. Review Role of Tax Incentives (SB65)

- Use Economic Modeling to determine impacts
- Assess manufacturing and development tax credits

Recommendations (cont.)



5. Increase Regulatory/ Licensing Transparency

- Develop a long-range transmission (HB 137)
- Adjust regulatory framework for technologies

6. Reduce Energy Consumption State-Wide

- Support education and communication programs
- Expand EE programs and analyze incentives

Recommendations (cont.)



7. Diversify Transportation Fuels

- Reduce dependence on outside sources
- Build infrastructure and promote research

8. Lay Foundation for Base Load Growth

- Examine coal and natural gas supplies
- Facilitate nuclear dialogue and evaluate RE storage

Energy & the Economy



- **What energy means to Utah's economy:**
 - **2011 Severance tax - \$59,855,286**

Employment Baseline for Utah Energy and Natural Resource Industries

Total Employees	23,128
Percentage of Utah's Total Workforce	1.9%
Total Wages	\$1,506,188,363
Percent of Utah's Total Wages	3.3%
Percent of State's Average Monthly Wage	171.9%
Number of Companies/Firms	1,139
Total Patents (2005-2009)	162
Venture Capital Deals (2000-2008)	20
Public Deals (2000-2008)	11

Office of Energy Development



- **Created in 2011 by H.B. 475**
 - Operating for approximately 14 Months
- **Progress Energy Development**
 - Single point of contact
 - Development of all energy resources
 - Shape and implement policy
 - Assists industry and citizens
 - ✦ Streamline processes with state and federal agencies
 - ✦ Track data and streamline processes

Vision & Mission



- **Vision**
 - To serve as the primary resource for advancing energy development in Utah.
- **Mission**
 - To provide leadership in the balanced development of Utah's abundant energy resources through public and private partnerships for economic prosperity, energy independence and a reliable, affordable energy supply.

Strategic Objectives (1-3)



- **Create & Implement Policy for the Governor, Legislature and State**
 - Promote legislative initiatives, state policies and directives, and the goals and strategic recommendations outlined in Utah's 10-Year Strategic Energy Plan

- **Industry Assistance**
 - Guide energy development projects through the regulatory, permitting and economic development processes, and support job creation for Utah.

- **Relationship Building**
 - Be a central hub within Utah through the establishment of a network of energy stakeholders.

Strategic Objectives (4-5)



□ **Funding Opportunities**

- Seek funding sources to carry out and support the implementation of energy projects and programs.

□ **Energy Education**

- Raise the level of energy awareness through educational programs, public outreach campaigns and technical assistance services.

State Policy Impacts in 1st Year of OED



- **S.B. 65 – Alternative Energy Development Incentive**
 - Tax Credit worth 75% of all new state revenues generated by a large-scale unconventional or renewable project. 20 year credit period.

- **H.B. 137 – Utah Energy Infrastructure Authority**
 - Authority has tax free bonding capacity to help facilitate “energy delivery projects” that facilitate responsible energy development and rural economic development

Regional & National Policy Impacts in 1st Year of OED



- **Governor Herbert's New Role as Chair of the WGA**
 - OED staff is working with the Governor's Energy Advisor and Environmental Advisor to help craft the Governor's Responsible Energy Development initiative for the WGA.

- **Engagement in Programmatic Environmental Impact Statements**
 - Staff has provided UT's comments for both the Oil Shale PEIS and the Solar PEIS

- **Coordination with UT's Federal Delegation**
 - Staff meets occasionally with Utah's Representatives and Senators – more frequently with their energy and lands staffers – to help keep them abreast of Utah's energy needs

Utah and Nuclear



- ❑ The **Blue Castle Project**, still relatively early in its predevelopment stages, has made nuclear a hot topic again in Utah
- ❑ For many Utahns nuclear is a sensitive subject given state-specific **anxieties over waste disposal issues**
- ❑ **Governor Herbert** has promised to start a balanced conversation on the potential that nuclear may offer Utah
- ❑ The **Office of Energy Development** – which has staff dedicated to unconventional fossils and nuclear energy

Utah's perspective on the LINE Initiative



- **Utah has its share of large institutions whose partnership on jobs and economic development it values**
 - Military installations, HAFB in particular, given its scale
 - The LDS Church
 - BYU, USU, UU, SLCC

- **LINE is a worthy and pragmatic recognition of the multiple values INL adds to Idaho**
 - Cultural and educational
 - Economic development, job creation
 - Community anchor

Collaboration w/INL – Starting the Discussion



- **Education about INL research capacity is a starting point**
 - Start with OED staff and other relevant parties within state government, then coordinate to branch out

- **Collaborate to assess regional needs and WGA tie-ins**
 - Can begin with the meetings outlined above

- **Start a discussion between Utah's research institutions and CAES to assess collaboration opportunities**
 - OED's Energy Research Triangle
 - USTAR, ICSE, ECC, EDL, EGI, etc.

Potential Areas for Collaboration w/INL



- ❑ **Hybrid energy systems** (Fossil/Nuclear)
- ❑ **Energy system dynamics** – e.g. renewables integration
- ❑ **Advanced vehicles** – wireless charging, electric roadways, battery management
- ❑ **Transformative concepts** of interest to ARPA-E

WGA-Specific Options for Collaboration w/INL



- ❑ Assisting in the development of a **10 Year Regional Energy Plan**
- ❑ Participating in **R&D needs planning** with other regional institutions
- ❑ **Identify unique initiatives** in supply, distribution, and end use that could add value to the western states
- ❑ Preparing sessions/content for upcoming **WGA-focused Utah Governor's Energy Development Summit**

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Questions?



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