

32nd Oil Shale Symposium



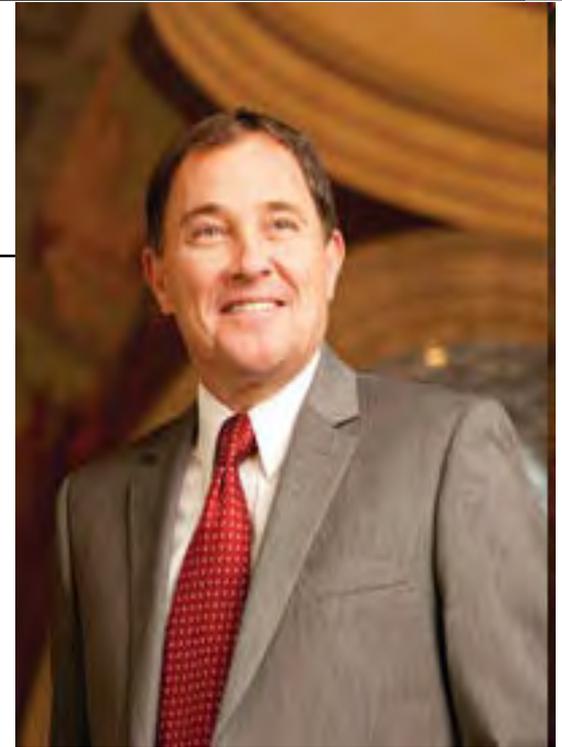
State of Utah
Office of Energy Development
Samantha Mary Julian
Director

October 15, 2012

Energy is a Priority

□ **Governor Herbert's Top Priorities**

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



"In the world of energy, we must face new realities, we must confront new challenges, and we must envision and act upon new opportunities!"

~Governor Gary R. Herbert

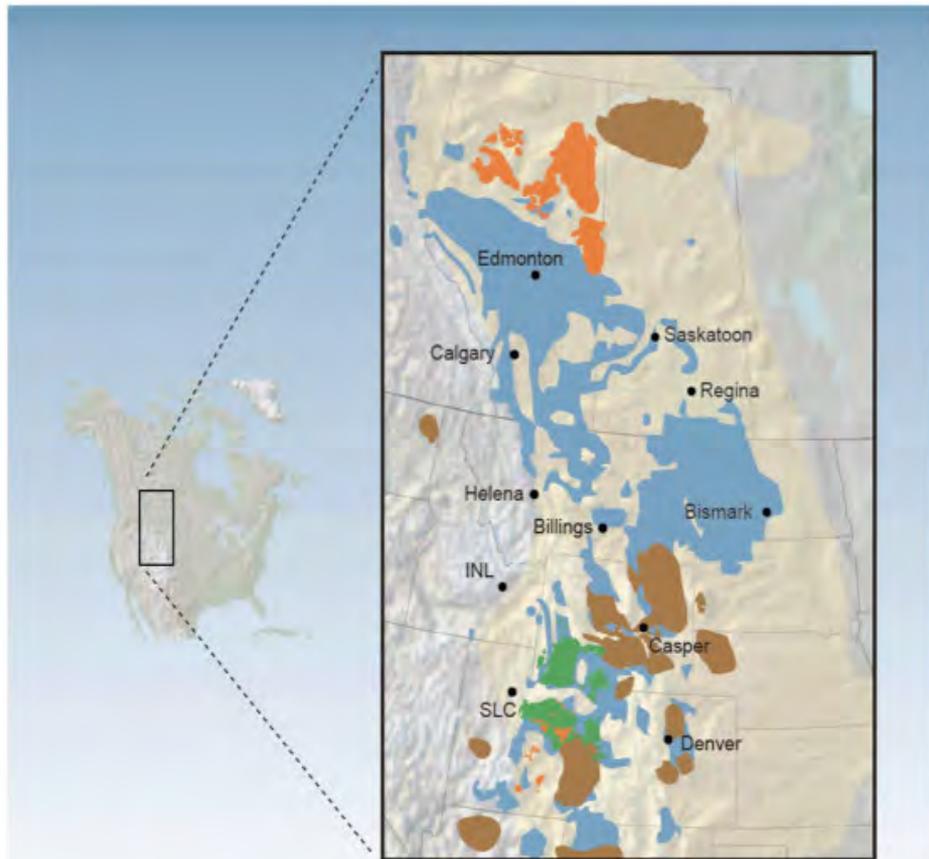
Energy Advances Governor Herbert's Other Top Priorities

- **Education:** Royalties from energy development on state lands goes into a permanent education trust fund
 - \$1B and counting

- **Economic Development:** Energy provides high paying rural jobs
 - 172% of state average wage

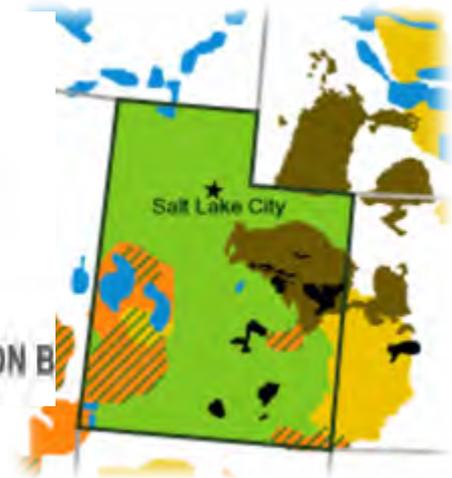


Utah's World-Class Resources



Oil sands Coal basins Oil shale Uranium

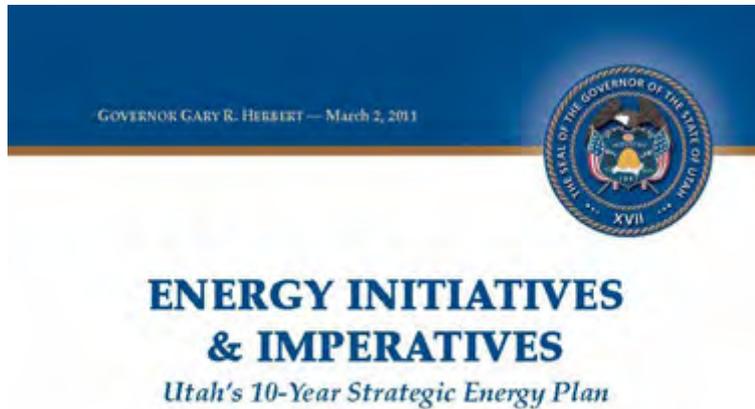
WIND
SOLAR
URANIUM
OIL SHALE
TAR SANDS
THIRD GENERATION B



“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.”

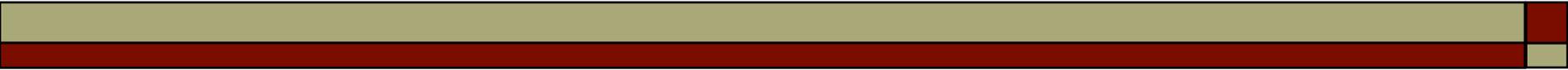
~Governor Gary R. Herbert

Advancing Utah's Energy Plan



- **Office of Energy Development (OED)** is coordinating the efforts of numerous public & private sector partners to implement Utah's 10-year Energy Plan.
- **OED's Mission** is 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.

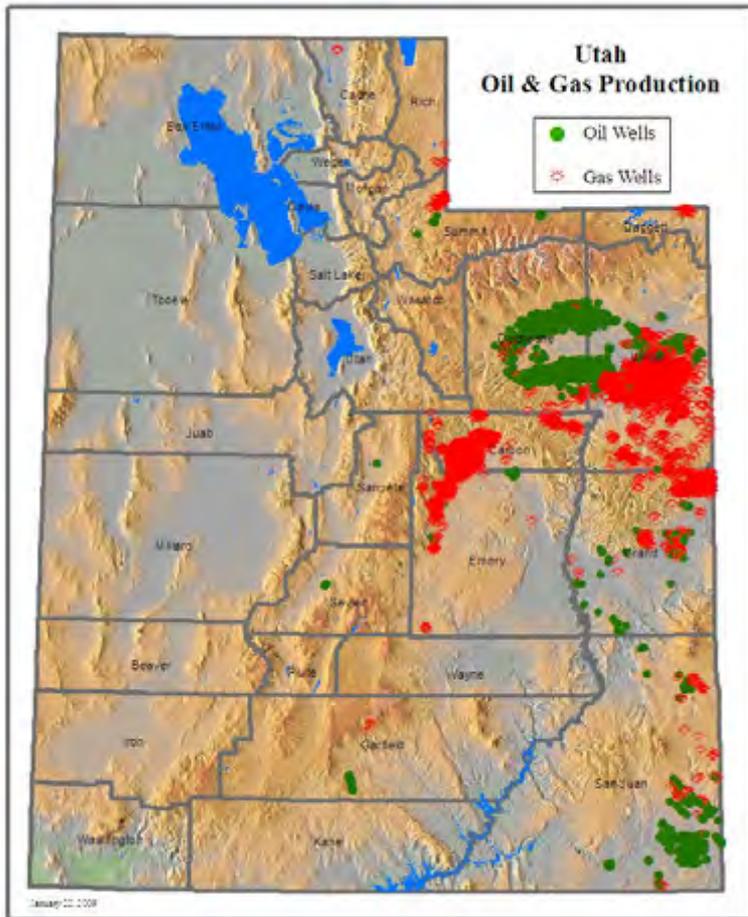




Strategic Objectives

- **Create & Implement Policy for the Governor, Legislature and State**
 - Promote the goals and strategic recommendations outlined in Utah's 10-Year Strategic Energy Plan, legislative initiatives and state policies and directives.
- **Provide Industry Assistance**
 - Guide energy development projects through the regulatory, permitting and economic development processes, and will support job creation for Utah.
- **Build Relationships**
 - Be a central hub through establishment of a network of energy stakeholders.
- **Seek Funding Opportunities**
 - Identify diverse sources to implement energy projects and programs.
- **Support Energy Education**
 - Raise the level of energy awareness through educational programs, public outreach campaigns and technical assistance services.

Utah's Fossil Fuel Industry is Thriving



□ Natural Gas

- 461,695,054 MCF (2011)
- 9th in US

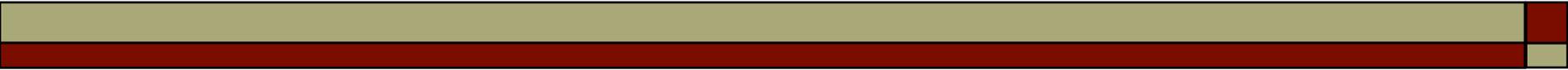
□ Crude Oil

- 22,265,746 bbls (2011)
- 11th in US
- Production doubled, past 8 yrs

Utah is Focused on Expanding Its Fossil Resource Development to Oil Shale

- Governor Herbert's 10-Year Strategic Energy Plan emphasizes the development of Oil Shale
- Utah has a diverse portfolio of significant energy resources, of which, oil shale may be the most valuable
- Oil shale development has the potential to significantly contribute to state and national goals of job creation, energy price stability and energy security



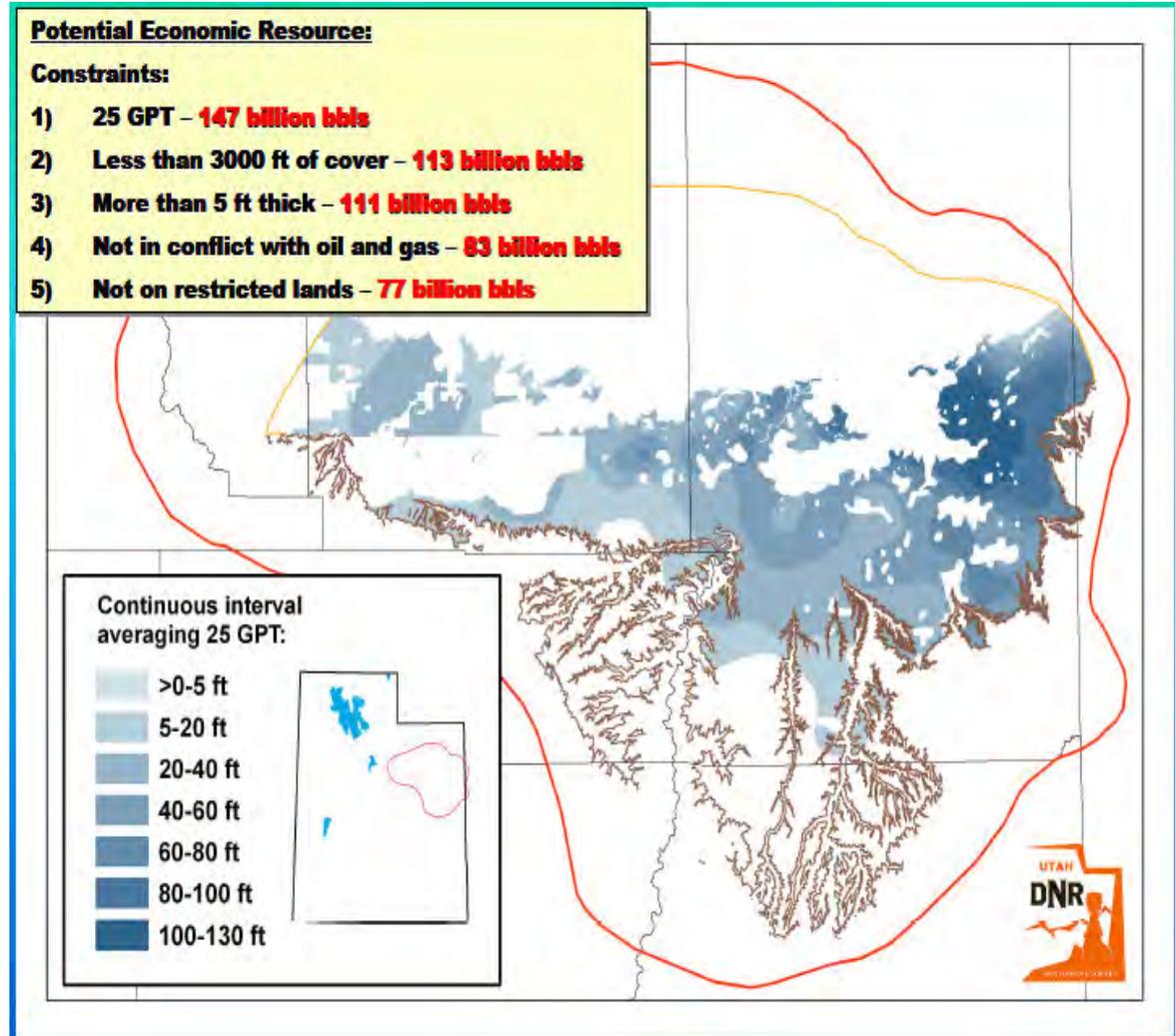


Providing Leadership and Resources to Advance Oil Shale Development

- Developing extensive mineral resource information
- Supporting research and new technology
- Providing land access and regulatory solutions
- Providing policy and legislative solutions

Developing Extensive Mineral Resource Information

- The Utah Geologic Survey (UGS) and Utah's research universities have created and compiled extensive information on Utah's oil shale resource, including potential development impacts.



Supporting Research and New Technology

- **Led by the Utah Science Technology and Research (USTAR):** Initiative and the University of Utah's Institute for Clean and Secure Energy (ICSE), Utah's research universities are working with industry to deploy new technologies for the responsible development of Utah's unconventional energy resources.



Bingham Research Center in Vernal, Utah



ICSE Pilot-Scale Testing Facilities in SLC

Oil Sands Technology Zone

Working with Uintah County and others to establish a pre-permitted zone near Vernal for oil sands innovation

- Identifies most responsible and economic technology
- Rewards the State & County with success fees
- Embraces Entrepreneurship
- **Potential model for oil shale technology zone**





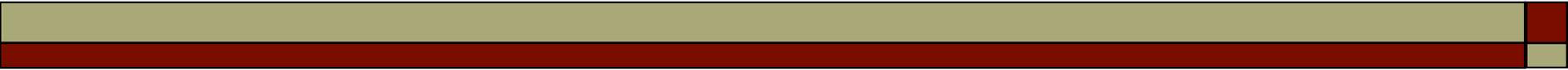
Providing Land Access & Regulatory Solutions

- **State Institutional Trust Lands Administration (SITLA)** has leased 93,000 acres of state lands for oil shale development
- **Division of Oil, Gas and Mining (DOGGM)** has expended significant resources to provide and defend permits for the industrial development of oil shale and oil sands



Providing Policy & Legislative Solutions

- **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
- **H.B. 83 – Uintah Basin Energy Zone**
 - Creates energy zone through much of Duchesne and Uintah Counties in Utah. Zone is established for purpose of maximizing efficient and responsible development of energy & mineral resources



Western Governors' Association

- Energy Education
- Energy Efficiency
- Alternative Fuels
- Improved Transmission
- Greater role for states in Energy Policy

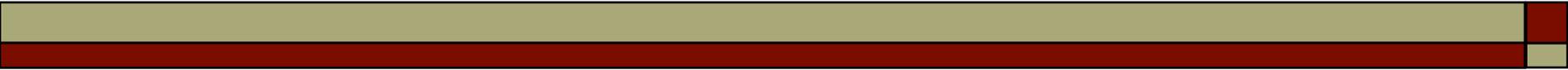
"We need an all-the-above approach, making appropriate use of all energy sources. Coal reserves in the West are enormous, with Western states providing more than half of the nation's coal. The potential for wind and solar in the West is practically unlimited. Additionally, both geothermal and biomass resources contribute to the region's energy portfolio and continue to grow in importance."

- Governor Gary R. Herbert, WGA Chair



Addressing the Remaining Challenges to Unlocking Utah's Oil Shale Resources

- Utah's community, business and policy leaders are focused on addressing the remaining political and environmental challenges standing in the way of significant oil shale development
 - Reduce air, land and water impacts
 - Increase efficiencies and net energy gain
 - Improve financing and infrastructure resources
 - Build consensus among stakeholders and skeptics



Utah Governor's Energy Development Summit

- **Unconventional Energy Breakout Sessions**
 - Experiences from a Global Oil Shale & Oil Sands Industry
 - The Reach of Technology in Lowering the Economic & Environmental Costs of Oil Shale & Oil Sands Dev.
 - Assessing the Potential Impacts of Large-Scale Development
 - Moving Towards Sustainable Land-Access Solutions

January 10th & 11th



Thank You!

Questions?

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