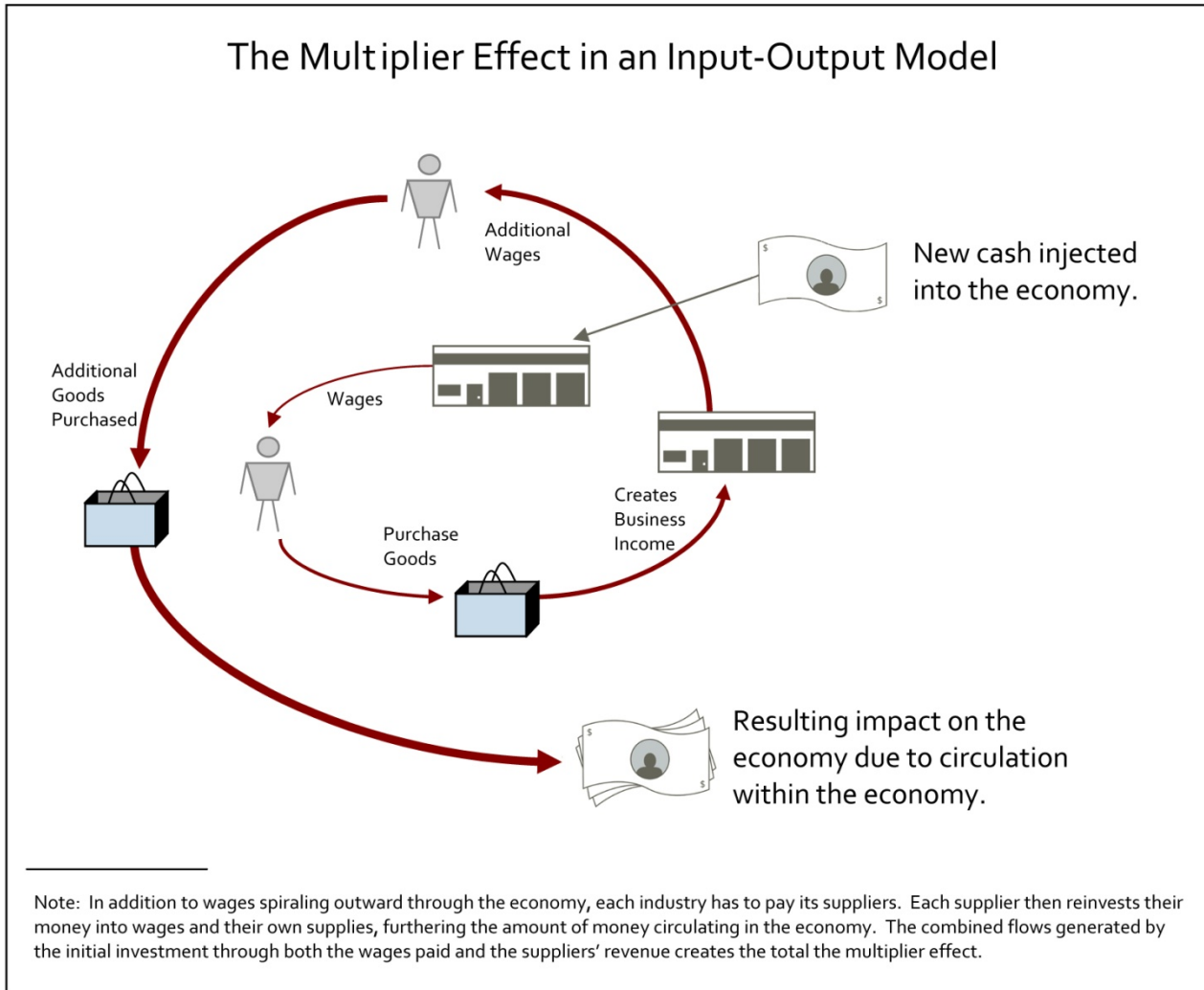


# **Building the Clean Energy Economy:**

**A Study of Jobs and Economic Development in Utah**

# Input-Output Model



# Clean Energy = Jobs

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- **6,910** more jobs than Baseline
- **4,110** more than Reference Scenario



# Biggest Winners

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• Construction	2,450
• Services	2,340
• Retail Trade	970
• Government	470
• Oil and Gas Mining	430

# Other Job Gains

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• Finance	280
• Insurance/Real Estate	250
• Manufacturing	230
• Wholesale Trade	150
• Agriculture	110
• Food	50
• Other Mining	30

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# Traditional Energy Industries

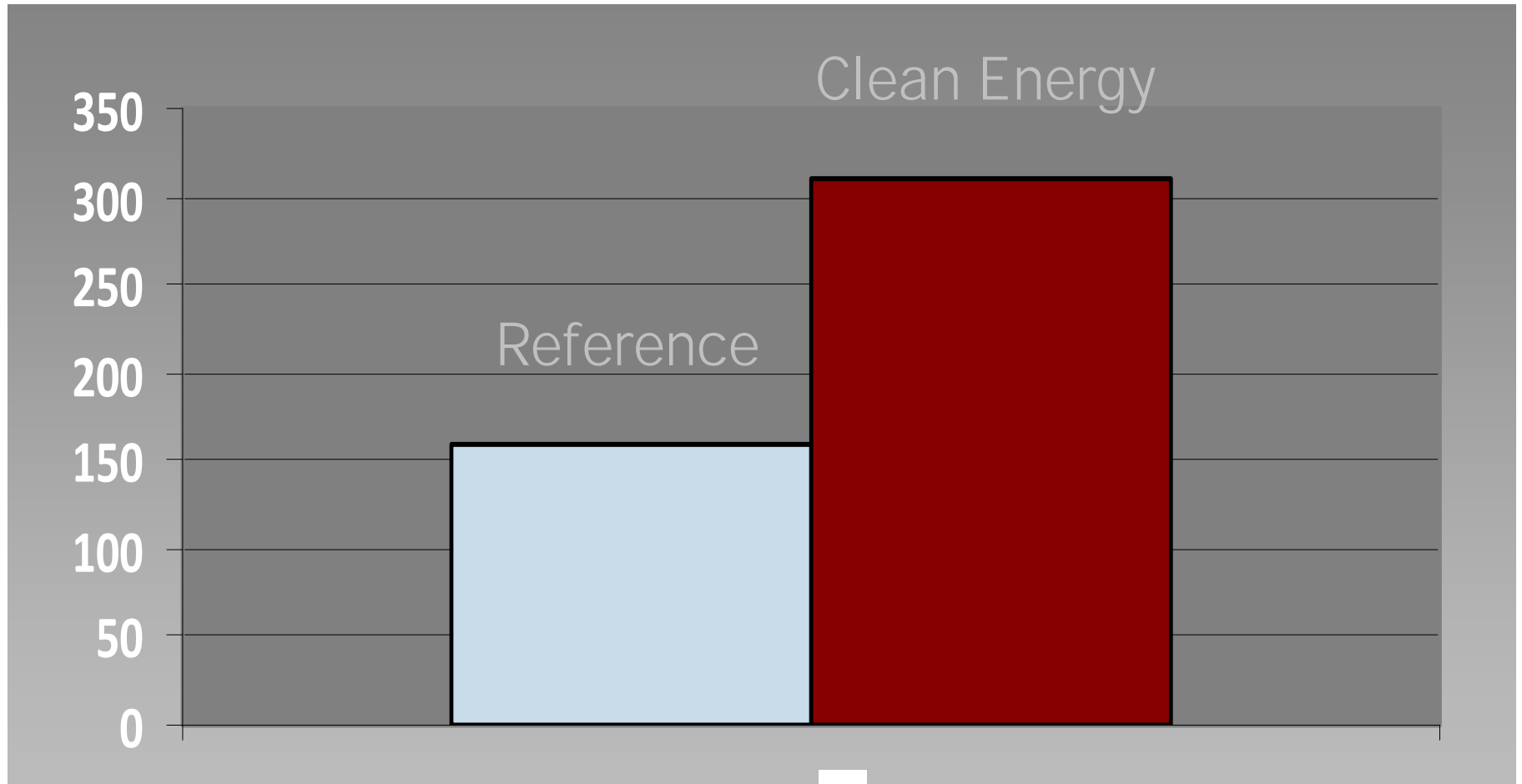
## GOPB Baseline Employment by Sector 2007-2020

	2007	2020	Change 2007 to 2020	2020 Energy Sector Jobs as % Total
Oil and Gas Mining	2,020	1,375	-645	0.08%
Other Mining	3,864	4,137	273	0.25%
Oil Refining	1,069	1,028	-41	0.06%
Coal Mining	1,690	1,354	-336	0.08%
<u>Utilities</u>	<u>6,673</u>	<u>7,413</u>	<u>740</u>	<u>0.45%</u>
Total	15,316	15,307	-9	0.93%

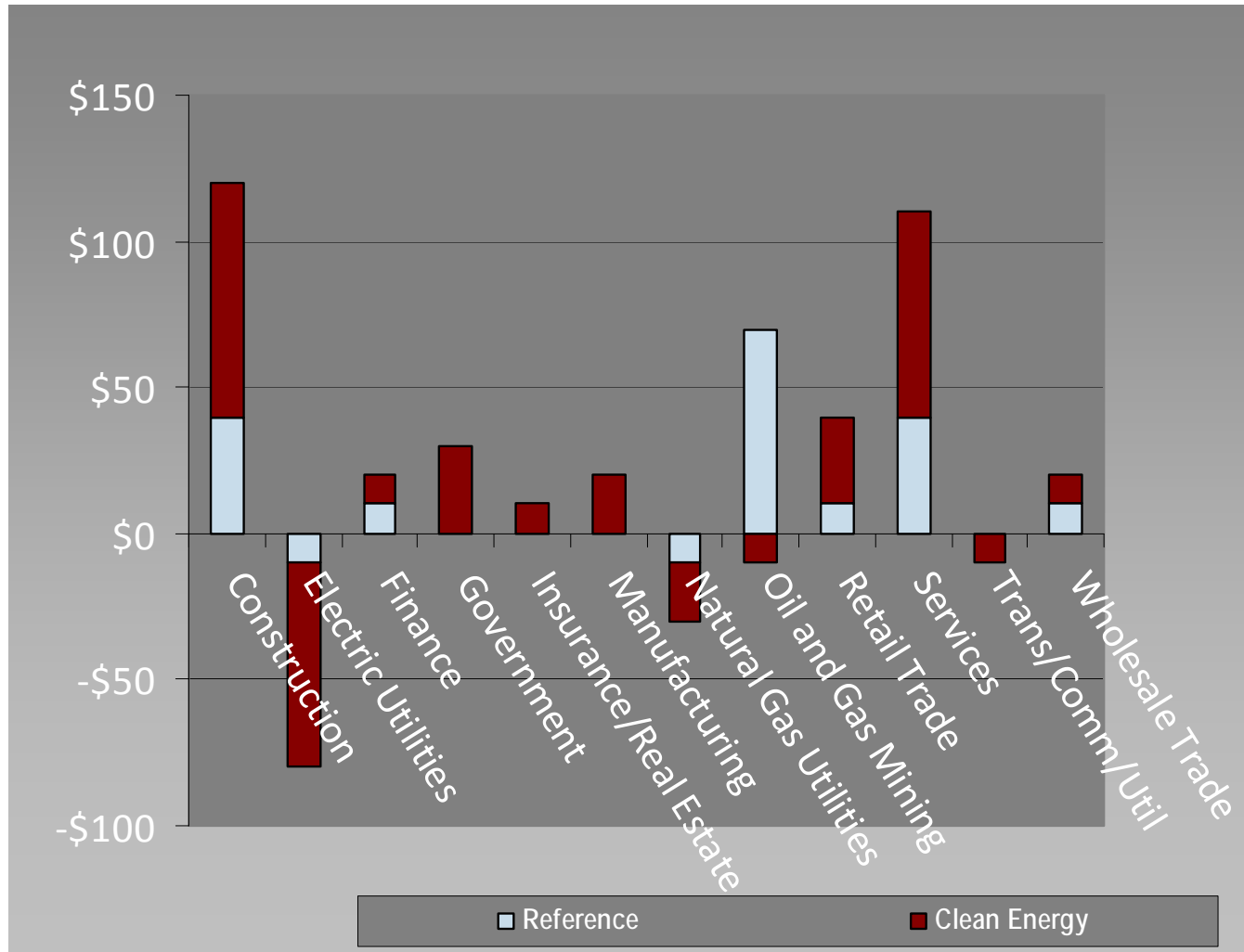
# Traditional Energy Industries

Industry	GOPB Baseline 2020	Reference Scenario	Clean Energy Scenario	Clean Energy 2020 Jobs as % Total
Oil and Gas Mining	1,375	1,805	1,805	0.11%
Coal Mining	1,354	1,334	1,334	0.08%
Oil Refining	1,028	1,028	1,028	0.06%
Other Mining	4,137	4,157	4,167	0.25%
<u>Utilities</u>	<u>7,413</u>	<u>7,453</u>	<u>6,723</u>	<u>0.41%</u>
Total	15,307	15,777	15,057	0.92%

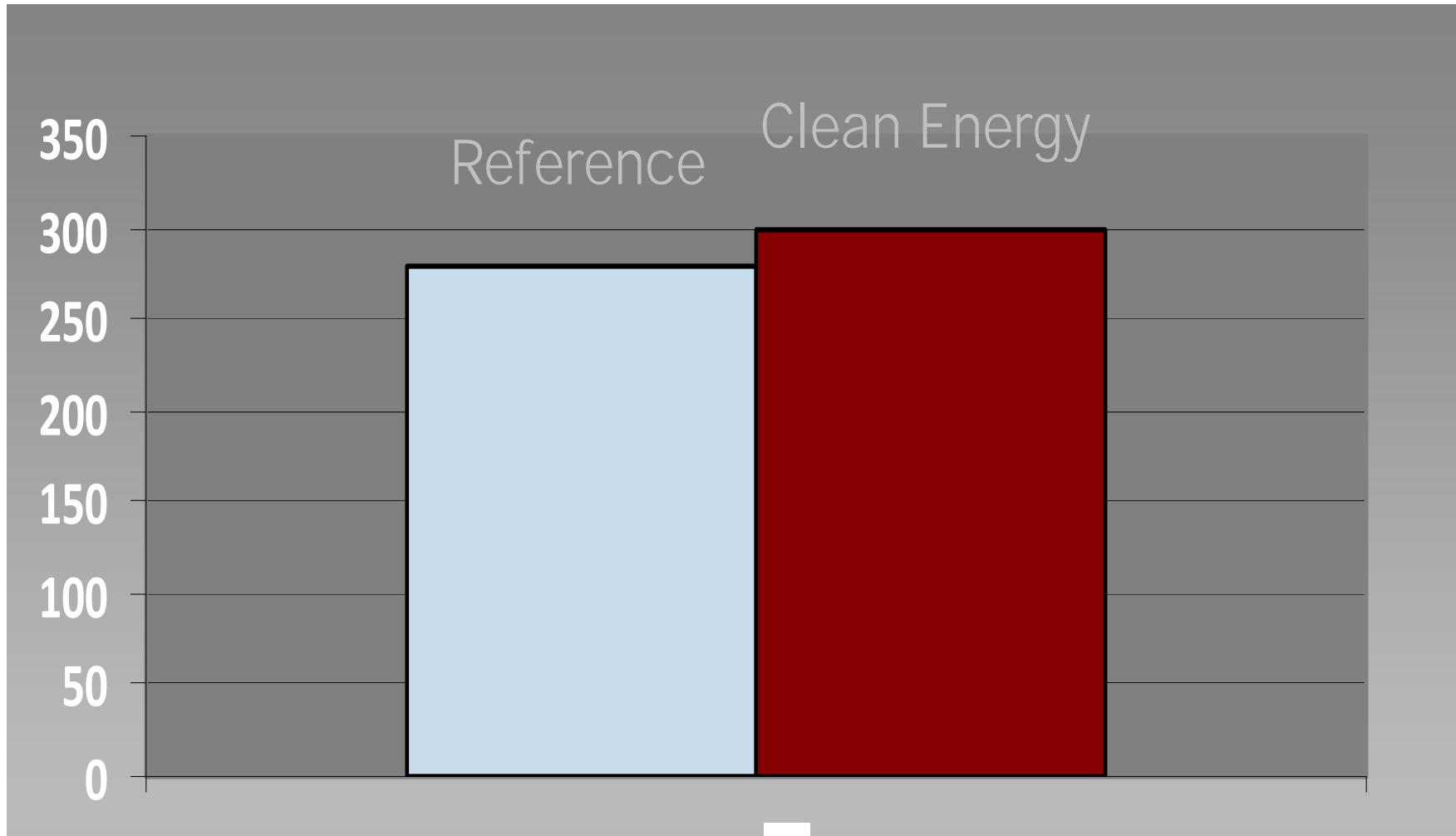
# Annual Earnings (\$MM)



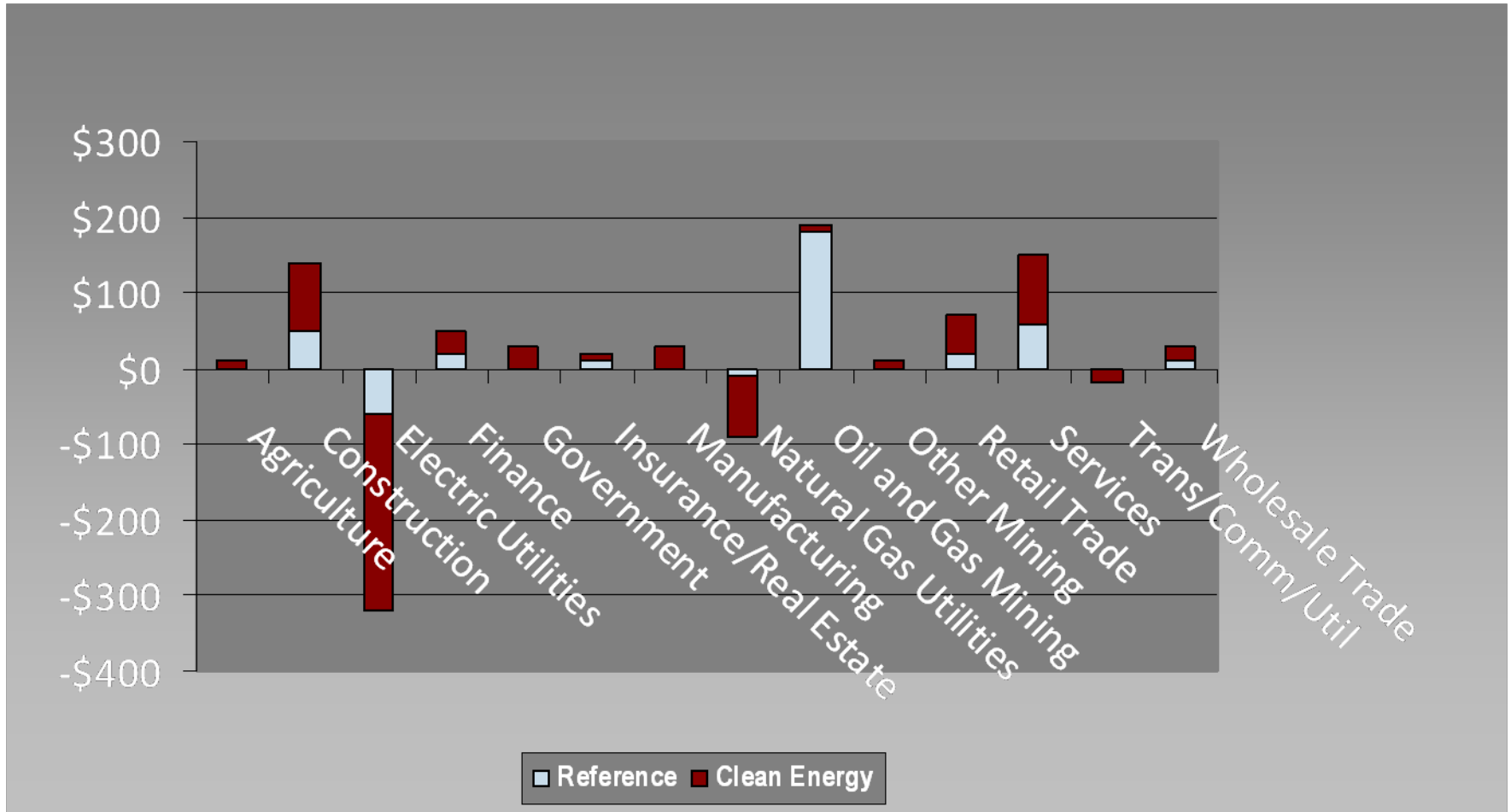
# Earnings Impacts by Sector



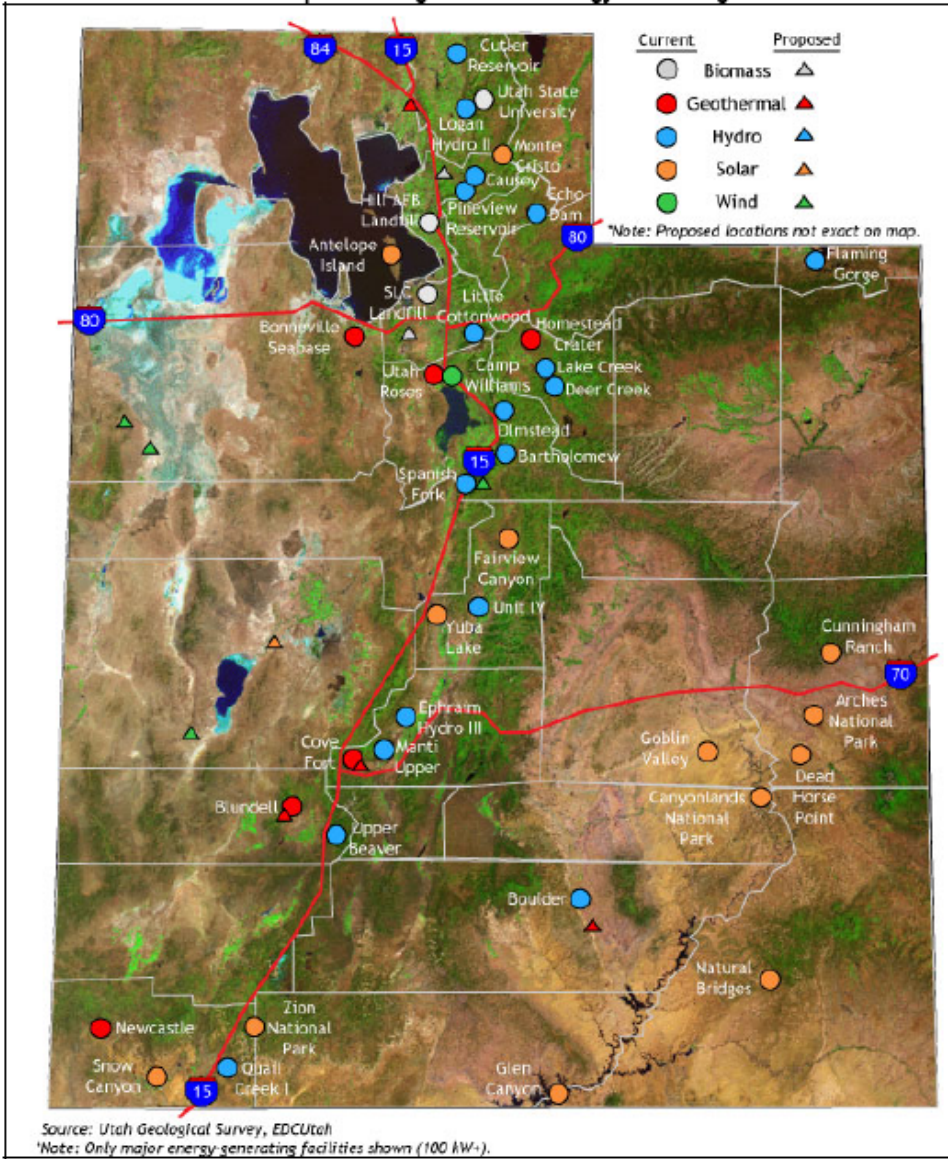
# Annual GDPS (\$MM)



# Annual GDP by State by Sector



State of Utah Map of Existing Renewable Energy-Generating Facilities



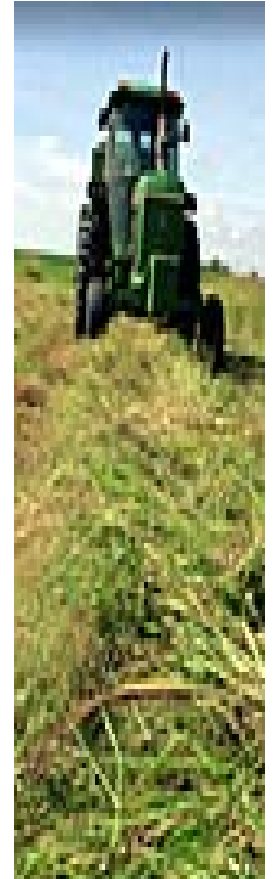
**92 identified Utah companies currently providing products or services in energy efficiency or renewable energy**

# Cross-over Economic Development

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- **25 by '25**

By 2025, America's farms, forests and ranches will provide 25 percent of the total energy consumed in the United States, while continuing to produce safe, abundant, and affordable food, feed and fiber.



# Diversification

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- Geographic
- Industrial
- Socioeconomic

# For similar level of investment:

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- More jobs
- More earnings
- More GDPS
- Hedge against volatile fuel costs and carbon risk
- Cleaner air