



*Renewable for Life*

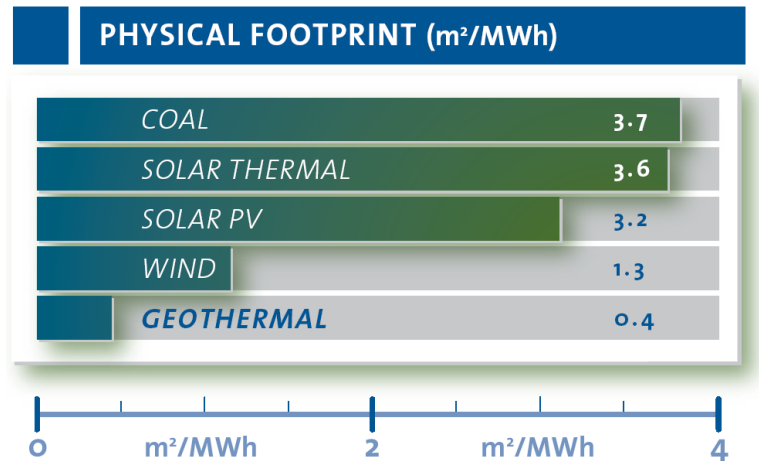
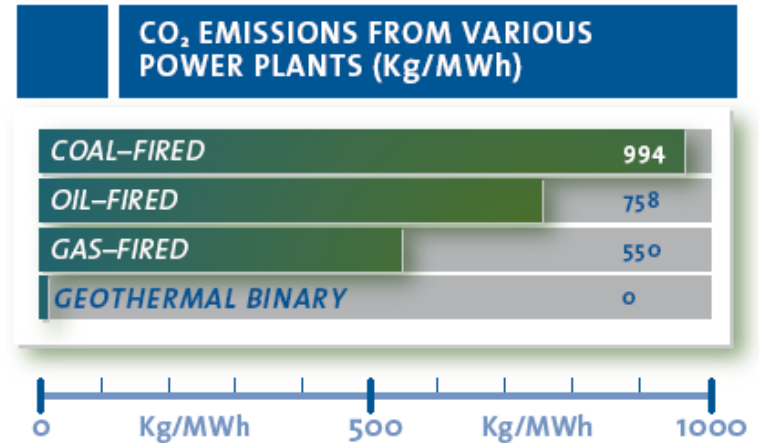
November 19, 2009

# Forward Looking Statement

Certain statements in this presentation may contain “forward looking” statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. This presentation is intended for informational purposes only.

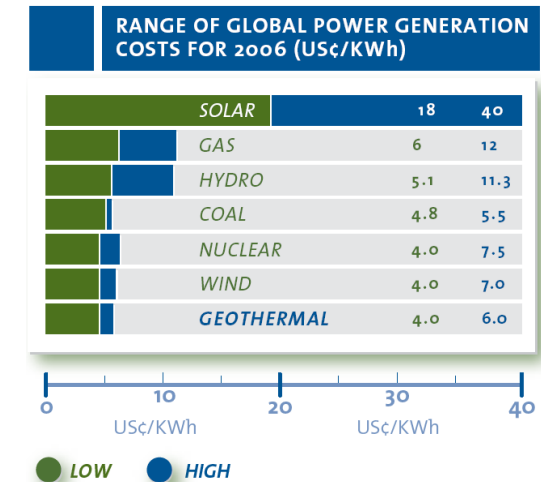
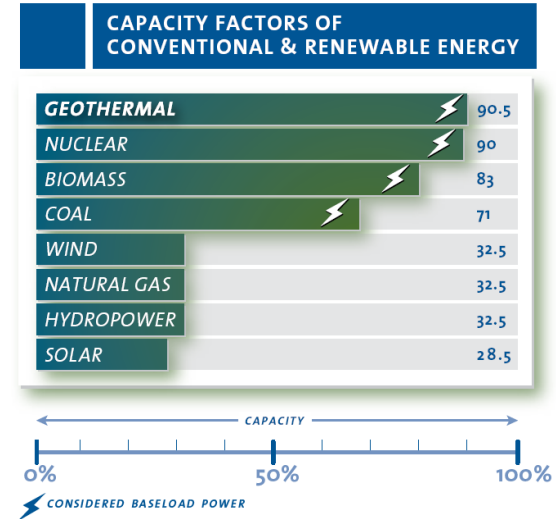
# Environmental Attributes of Geothermal

- Geothermal has near **zero** emissions
- Geothermal has the **smallest physical footprint**



# Economic Attributes of Geothermal

- Geothermal has the **highest capacity factor** of any renewable
- Geothermal is **cost competitive** with all other sources of power
- **Strong gross margin** of 15%-25% at current electricity prices

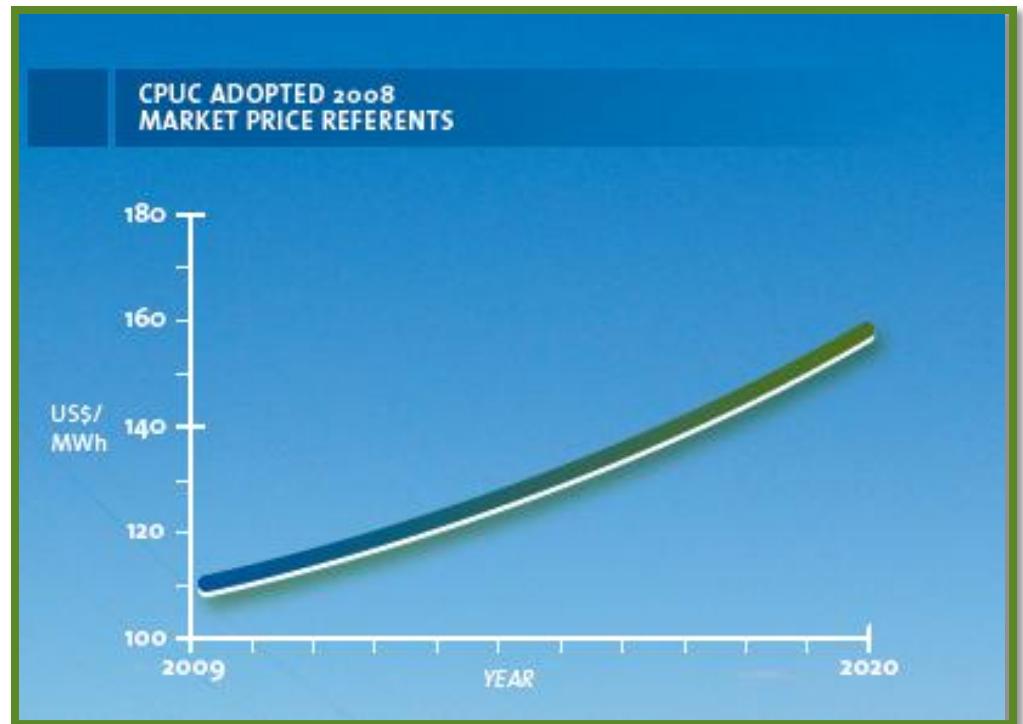


# Political Will in the US

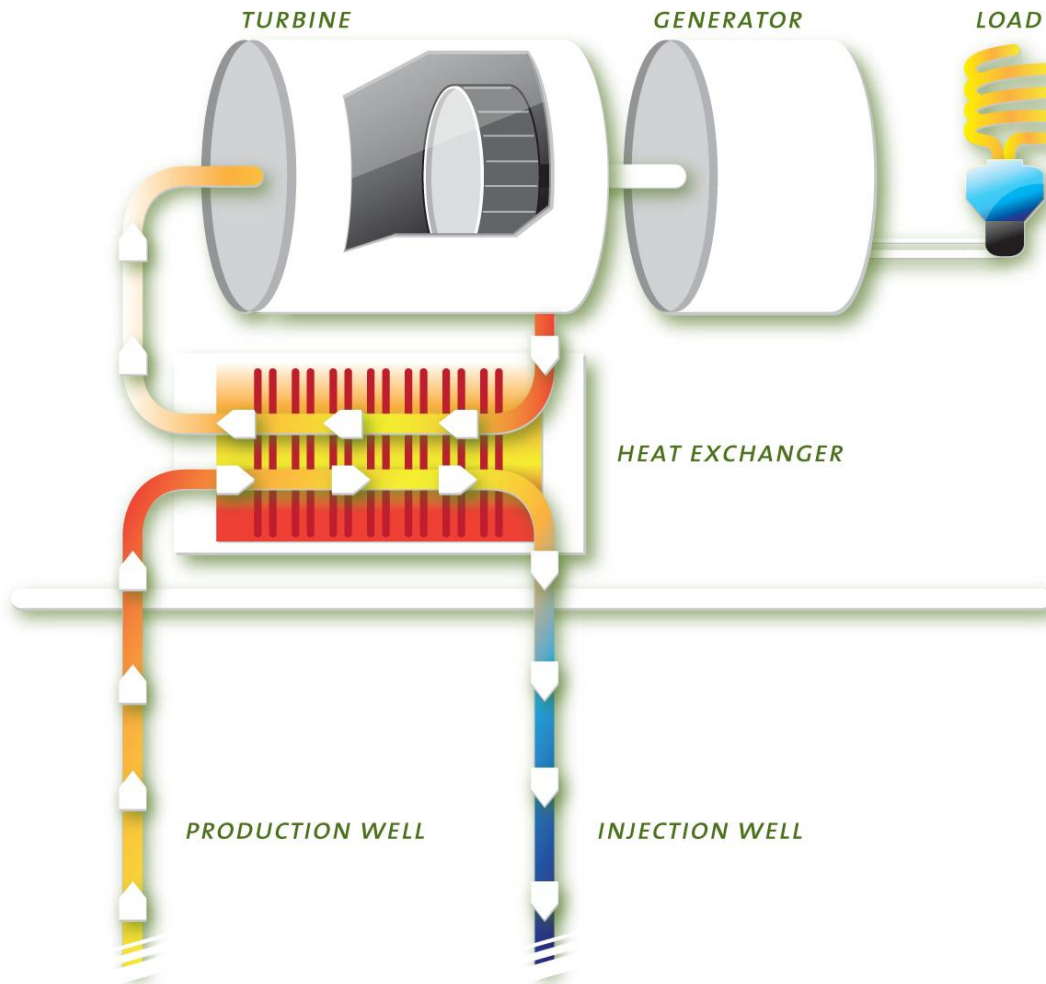
- **Three incentive programs** from the United States:
  - American Recovery and Reinvestment Act 2009
    - SGP was awarded **US\$10 million in Grants** October 30<sup>th</sup> 2009
  - Production/Investment Tax Credit (PTC / ITC)
    - Option to elect a **30% development cash back payment** if in production by 2013
  - Low Cost Government Loans Guarantees
    - if the credit markets “*brake*” again, geothermal projects can secure low interest debt **5%**

# Demand for Geothermal Power

- High demand for renewable **base-load** power (vs. Wind and Solar)
- State Mandated **Renewable Portfolio Standards (RPS)**:
  - 33% by 2020 CA
  - 25% by 2025 NV
- Market price for power set to rise sharply
- Currently \$95 (NV) to \$110 (CA) per MWh
- 20 year Power Purchase Agreements (PPA)



# SGP Target Technology: Binary Cycle Power Plant



- There is no technology risk, geothermal has been around for over 100 years
- Binary plant technology has been around since the 1980s
- Preferred EPC contractor for binary plants is Ormat
- The minimum flow and temperature for Binary is 1,500 gallons per minute and 150 degrees Celsius

# SGP Investment Highlights

- Pure play geothermal explorer and developer
- Portfolio of quality assets
- On track to be in production by 2012
- Experienced and technically strong team
- Near-term upside:
  - \$12.5 million in cash and \$10 million in grants
  - Ongoing drilling and joint venture negotiations
  - Targeting bankable feasibility within 12-18 months
- Long-term stable income

# Strong Asset Base

- Large pipeline of 16 projects with over 90,000 acres
  - **Tier One Projects:**
    - advanced stage projects
      - permits secured and considerable exploration work done
      - \$20 million to reproduce historical drilling on projects
      - independent estimates from GeothermEx P90% **191 MW**
    - Paymaster District, Reese River and Barren Hills
  - **Tier Two Projects:**
    - Internal estimate of **+1,000 MW**

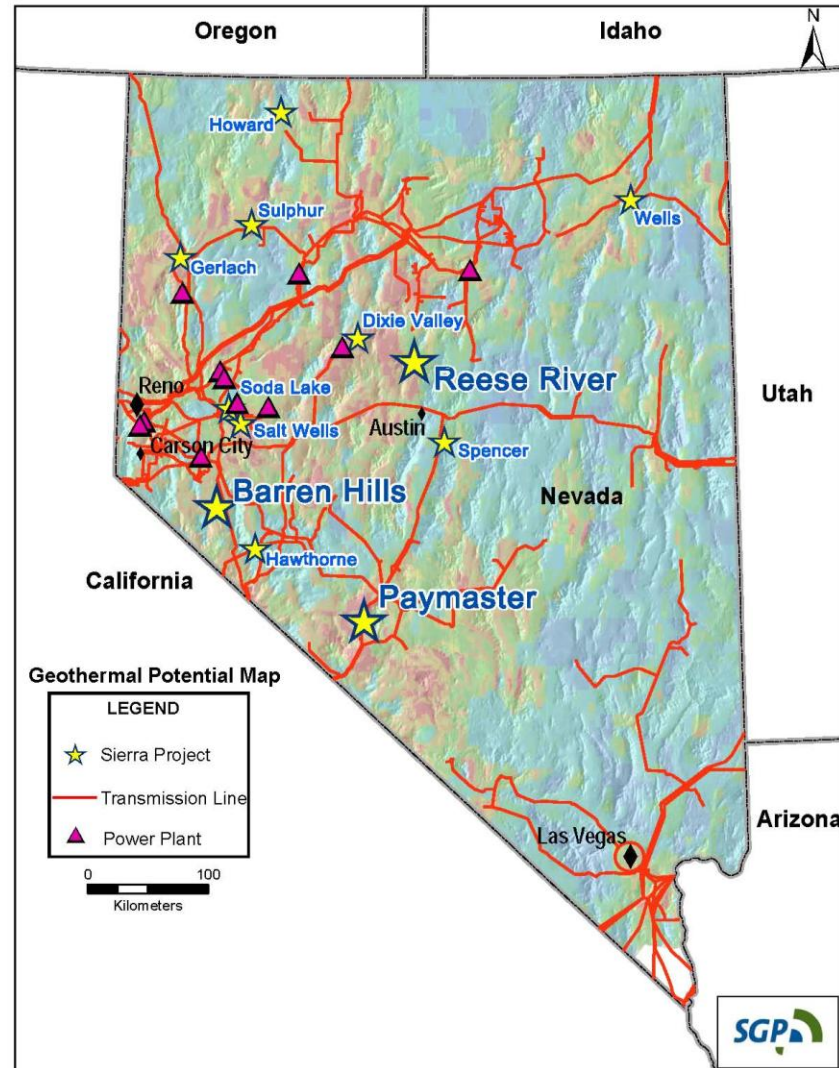
# Assets Strategically Located

## SGP's focus is Nevada...

- High Heat flow area
- More developed geothermal fields than any other US state
- Projects acquired 2002-2005

## Criteria in selecting our portfolio:

- Proximity to transmission
- Historical data with known heat anomalies

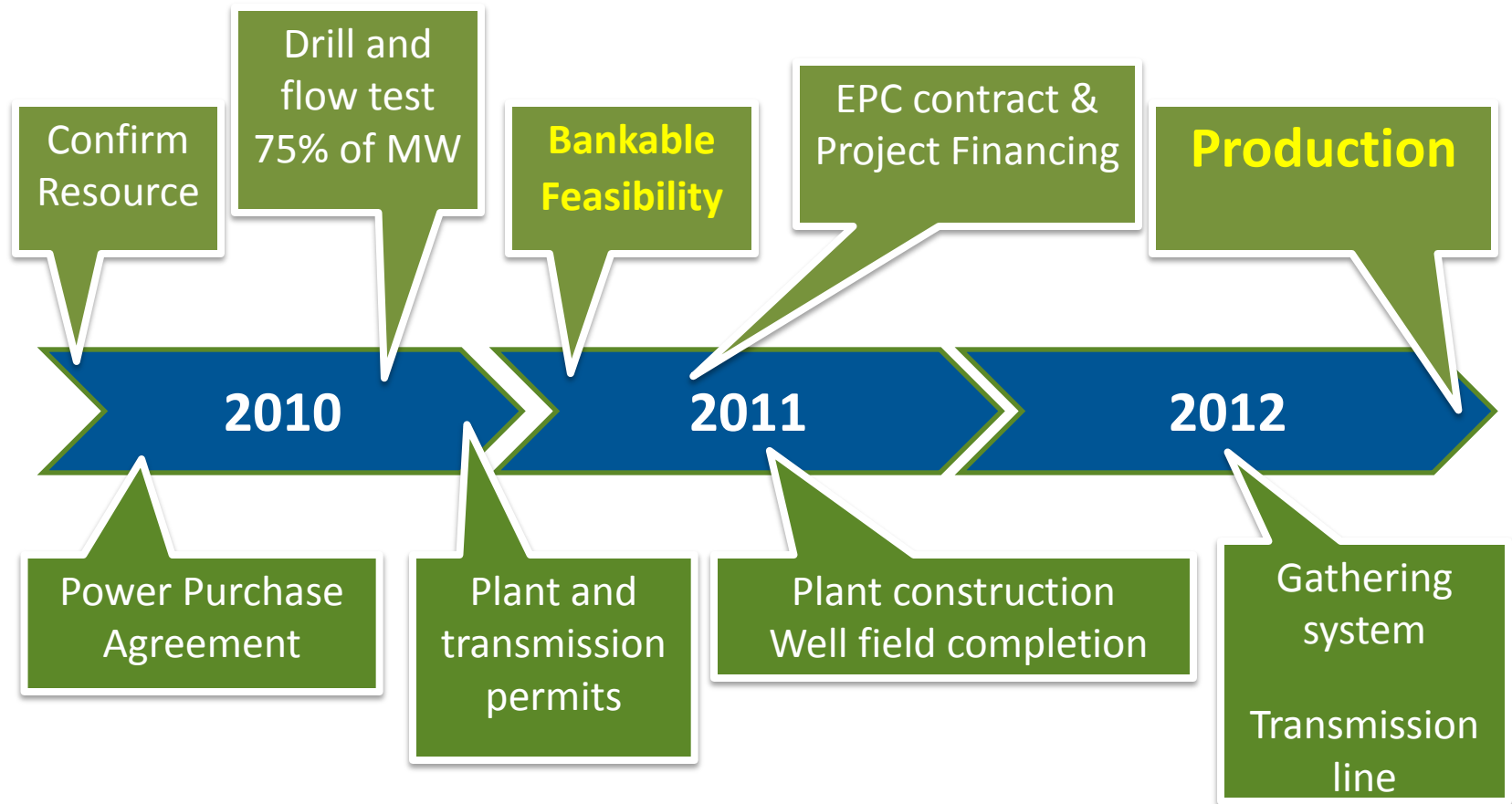


# Paymaster District Play

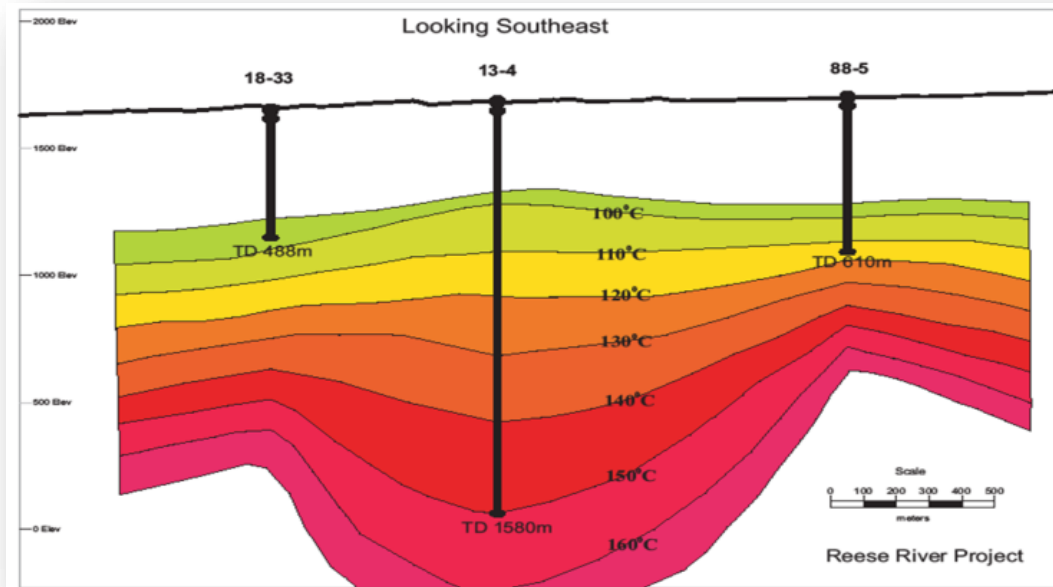


- Includes two Tier One projects, **Silver Peak** and **Alum**, as well as a Tier Two project, **Pearl**
- **Efficiencies of scale** in drilling costs and transmission infrastructure build-out
- 17 MW capacity secured with two 55 kV transmission lines and a substation on the lease
- Awarded **US\$10 million in DOE grants** for Silver Peak and Alum

# Paymaster Phase 1 - Silver Peak (20 MW)



# Reese River Project



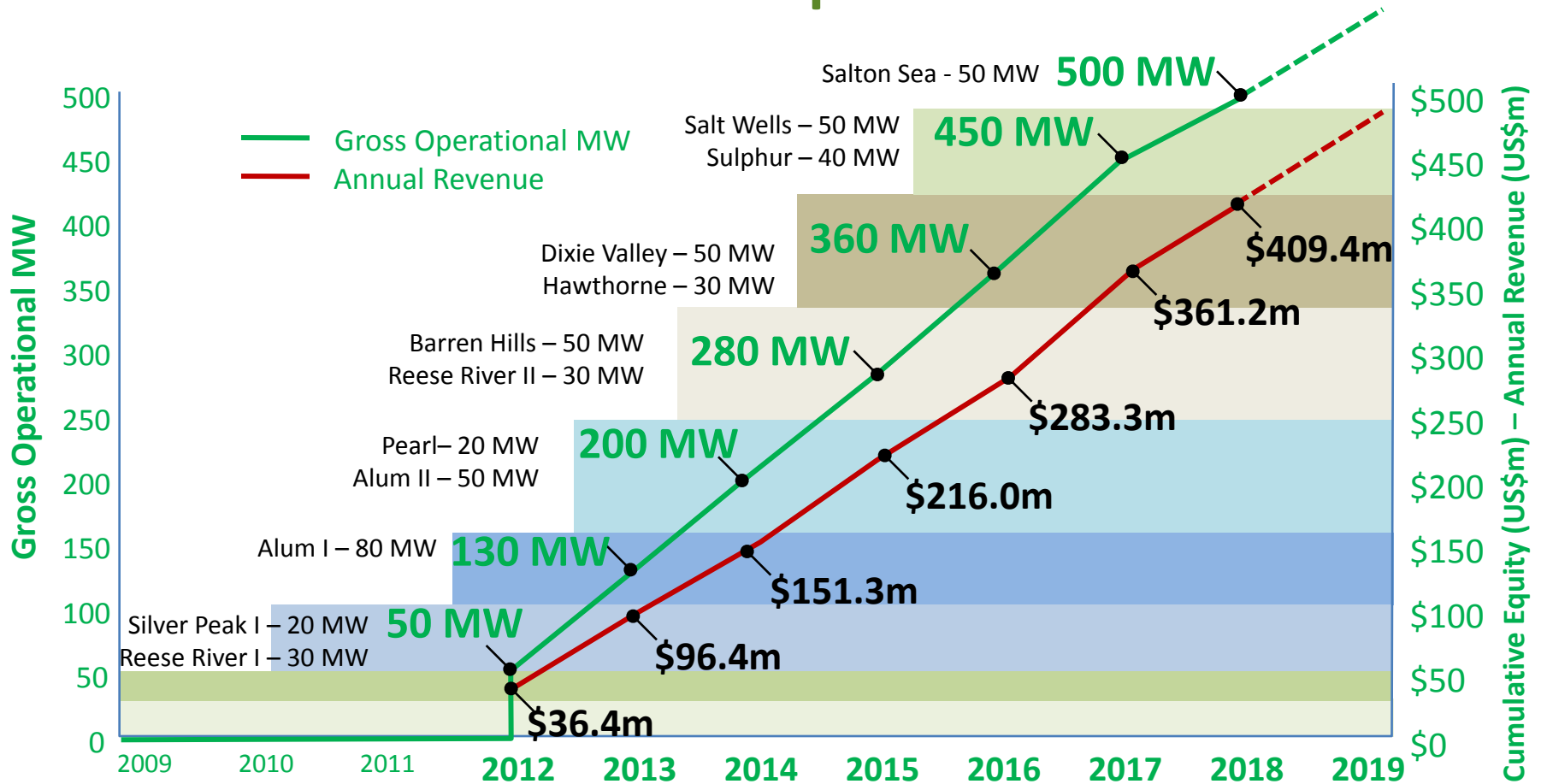
- Temperature gradients are 5 times higher than average
- 52 gradient wells, 5 slim wells and significant geophysics
- Encountered commercial grade temperatures 150°C (well 13-4)
- GeothermEx estimates 26MW-58MW capacity

# Barren Hills Project



- Close to the California border, with good road & transmission access
- Chevron drilled 44 wells, recorded temperatures of 104°C
- GeothermEx estimates a resource capacity of 55 MW (P90%)

# 10-Year Development Plan



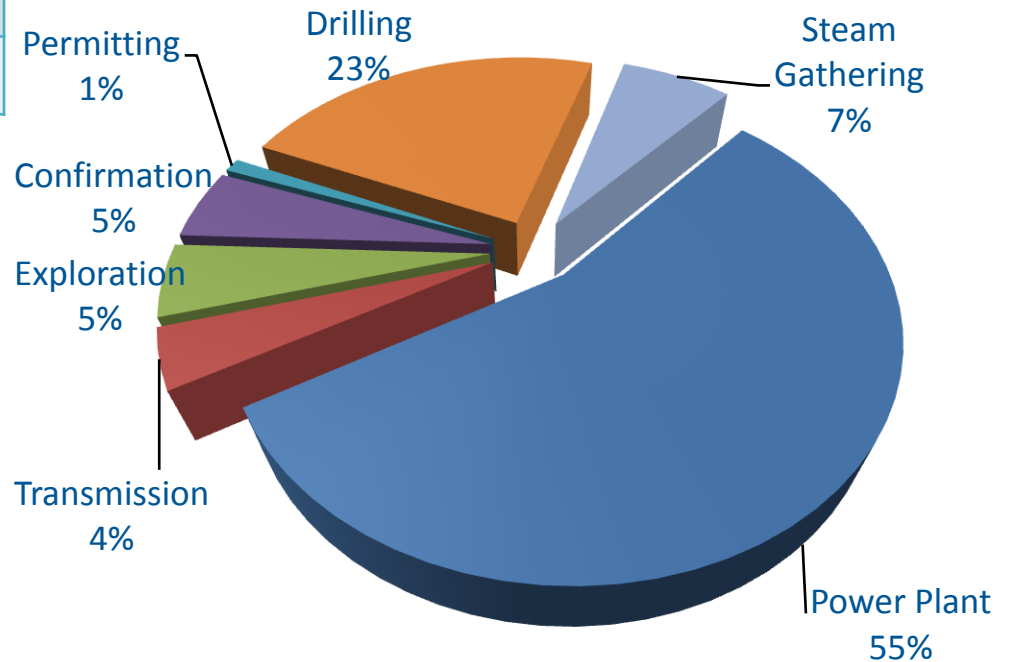
Development plan represents the estimated number of MWs online subject to financing availability and other factors

# 30MW Geothermal Power Plant

<b>Plant Capacity</b>	<b>30 MW</b>
Capital Expenditure (US\$)	\$120M
Annual Revenue (US\$)	\$25M
NPV <sup>1</sup> (US\$)	\$44M
Return on Equity <sup>2</sup>	25%

1. Based on a discount rate of 10%, an inflation rate of 2.0%, an \$100/MWh PPA, \$21/MWh PTC for 10 years
2. Based on a 80/20 debt to equity ratio with a 9% interest rate

## Cost Breakdown



# Experienced Independent Directors



## **Jack Carthy, P.Eng., MBA (Chair Governance Committee)**

SGP Board Member since 2007, over 30 years of international engineering and management experience with Finning International and Maxim Power Corporation.



## **Laura Rita Theil, BSS, LLB, MBA (Chair Compensation Committee)**

SGP Board Member since 2007, over 20 years experience in business and energy sectors, ex-director of Scottish Water PLC and Schroder Salomon Smith Barney's UK and European Renewable Energy Practice.



## **Alfred Sorensen, B.COMM, CA (Chair Audit Committee)**

SGP Board Member since 2008, 22 years experience in business and energy sectors, President and CEO of Galveston LNG, former President of Duke Energy (Europe) Ltd and partner in Continental Energy Corporation.



## **Jerry Evans, P.Eng, MBA**

SGP Board Member since 2009, over 25 years experience in corporate finance and investment management. Managing Partner at Aurion Infrastructure Inc.

# Management Team



## **Gary R. Thompson, P. Geo, President & CEO, Director**

24 years of resource project management experience including mineral, oil & gas and geothermal exploration. Project geologist for companies including EnCana Corporation, CBM Solutions, Newmont and NovaGold. Founded Cayley Geothermal in 2001.



## **Jeff Finkelstein, CA, CFO**

24 years of financial experience including 14 years with public companies in the technology and mining sectors. Former CFO of Smart Tire Systems and Controller of Silver Standard Resources and Golden Knight Resources.



## **Joel Ronne, P. Eng, VP & COO, Director**

16 years energy & power experience including work with Sound Energy, Cayley Geothermal, BC Hydro, Canmet Coal and International Atomic Energy Agency.



## **Roberto Ricci, MBA, VP Corporate Development**

14 years of experience including 7 years of investment banking with extensive knowledge of structured financing for energy, transportation and infrastructure assets. Past positions held at Credit Suisse First Boston and NatWest Markets.



## **Lesley Russell, BA, LLB, Corporate Secretary**

12 years of experience in a variety of international administrative and legal positions.

# SGP Market Facts as of Nov, 19 2009

**Symbol: TSX-V: SRA**

**Recent Price: \$0.345**

**52 Week Hi/Lo: \$0.385 - \$0.075**

**Shares Issued: 128 M**

**Options/Warrants: 57 M**

**Fully Diluted: 185 M**

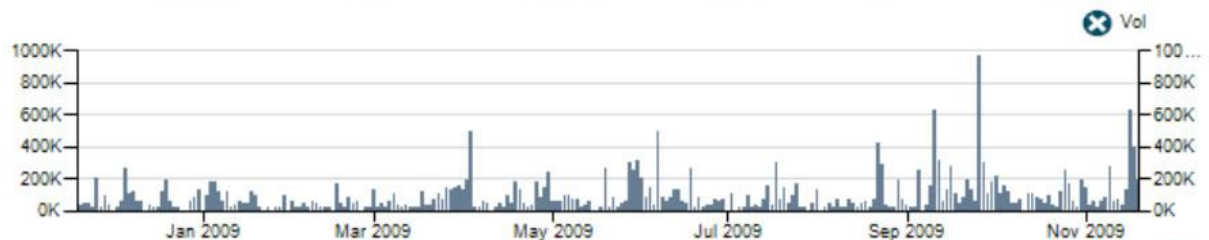
**Market Cap: \$44 M**

**Working Capital: \$12.5 M**

**DOE Grants: \$10 M**

**Debt: \$0**

Sierra Geothermal Power Corp (TSX-V : V.SRA)



POWERED BY  
**Stockhouse**

000's except ratios, per share  
data, MW's & prices



Includes WGP & GEO

	TSX:GTH	TSXV:SRA	TSXV:NGP	NYSE:ORA	TSX:MXV	TSX:RPG
<b>Price as of Nov 09 2009</b>	\$1.60	\$0.30	\$0.95	US\$37.70	\$1.83	\$3.25
<b>Target Price (1-year)</b>	\$2.10	\$0.54	\$1.95		\$2.50	
<b>Total ROR (1-year)</b>	31.3%	80.0%	105.3%		36.6%	
<b>Rating</b>	Spec. <b>BUY</b>	Spec. <b>BUY</b>	Spec. <b>BUY</b>	-	Spec. <b>BUY</b>	-
% below 52 week high	33%	22%	27%	12%	13%	na
% above 52 week low	248%	300%	239%	71%	30%	na
<b>Filing Currency</b>	USD	CAD	USD	USD	USD	USD
Shares O/S	70,134	128,198	94,548	45,423	248,545	135,872
<b>Market cap</b>	C\$112,214	C\$38,459	C\$89,820	US\$1,712,447	C\$454,837	C\$441,584
<b>EV</b>	US\$90,972	C\$15,302	US\$126,596	US\$2,204,653	US\$394,111	US\$231,299
<b>EV (C\$)</b>	C\$96,085	C\$15,302	C\$133,711	C\$2,328,555	C\$416,260	C\$244,298
<b>Float</b>	78.6%	73.3%	88.2%	43.7%	54.1%	75.4%
<b>AVG Volume (000's)</b>	37.3	87.3	223.9	277.9	498.3	na
<b>Resource, MW (gross)</b>						
Generating	17	0	50	505	11	10
Under Construction	33	0	0	87	12	101
Future Estimated (Independent Estimate)	114	191	97	157	316	268
Future Estimated (Management Estimate)	0	395	50	0	0	400
<b>Gen + Under Construction</b>	50	0	50	592	23	111
<b>Gen + Under Construction + Independent Estimates</b>	164	191	147	749	339	379
<b>Gen + Under Construction + All Estimates</b>	164	586	197	749	339	779
<b>EV/MW (C\$)</b>						
Generating	\$5,652	na	\$2,674	\$4,611	\$37,842	\$24,430
Gen + Under Construction	\$1,922	na	\$2,674	\$3,935	\$18,098	\$2,204
Gen + Under Construction + Independent Estimates	\$586	\$80	\$910	\$3,111	\$1,228	\$645
Gen + Under Construction + All Estimates	\$586	\$26	\$679	\$3,111	\$1,228	\$314

*[www.sierrageopower.com](http://www.sierrageopower.com)*

**TSX-V: SRA**

[info@sierrageopower.com](mailto:info@sierrageopower.com)

Tel: 604.683.0332

Toll Free: 1.800.563.5631