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### **Executive Summary**



- ASX Listed Utility Company electricity from sustainable sources, for baseload power:
  - Origin Energy
  - Enel Green Power
  - EON Renewables
  - EDC
    - WE ARE IN THE SAME BUSINESS
- Substantial holder of low risk development projects:
  - Focus on invested data, not blue sky potential as with peers
  - Removed resource risk, introduced financing
  - Developer of Power Plants, not spruiker of future potential
- Sector leading performance positioned to be first producer of Geothermal Power in the ASX space by end of 2013:
- Targeting geothermal resources in geologically favourable settings
  - Development projects = countdown to significant cashflow
  - Financeability greatly enhanced by maturity of these projects
  - Argentina 90%+ funded, with more finance and corporate partnerships coming
  - East Africa Carbon copy of Argentina, will shake the foundations of perception

## **Corporate Overview**



#### **SHARES ON ISSUE:**

Share Price (21/02/11)

Market Cap (AUD)

Cash (AUD)

Debt

#### SIGNIFICANT SHAREHOLDERS: (16/2/11)

Directors	35%
Luxor Assets Pty Ltd	10.6%
1147 Pty Ltd	3.65%
La Jolla Cove	1.63%
Washington H Soul Pattinson	1.93%
Planet Gas Ltd	1.38%
Top 20 shareholders	61%
No of shareholders	~700



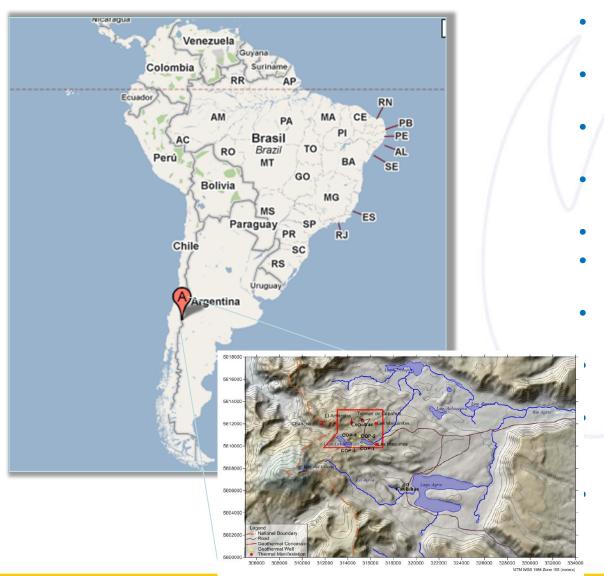
12 Month Performance chart to 21 February 2012

#### **BOARD OF DIRECTORS:**

Torey Marshall Managing Director
Ray Shaw Non Executive Chairman
Norm Zillman Non Executive Director

## Copahue Project





- 55km to national electricity market interconnector
- Sealed bitumen road to site from Neuquen City
- Power lines connected from site to nearby town of Caviahue
- Plentiful water supply in the Patagonian locality
- Town nearby with full range of facilities
- Oil field services and equipment in the Province
- In between two major roads connecting Argentina and Chile
  - Population of Neuquen Province 475,000, a prosperous resource state
  - Population of adjoining Mendoza
    1.7m, a popular tourist and wine
    district
  - Argentinean Government to underwrite power offtake pricing

## Progress in the Dark



#### Resource Upgrade

- 150% increase in resources
- Performed by SKM consultants
- CanGEA Compliant

#### EIA Stage 1

Geothermal Resource Classification	Generating Capacity	Stored Heat in Place	
1 1	(MWe)	(PJ)	
Measured Resource	19	700	
Inferred Resource - Vapour Zone	55	2500	
Inferred Resource - Deep Liquid Zone	190	7300	

- Benefits for the community: The EIA lists several potential benefits for the community,
- Environmental contingencies: The EIA lists all existing abandoned installations of the old pilot plant, wells and vapor pipeline to Copahue, considering them as negative environmental passives outside of the scope of the project's responsibility.
- Environmental risks: The report mentions a set of potential risks to be considered during the execution of the proposed works during the exploration stage, recommending its quantification according to international standards (risk matrix for every sensible environmental issue), and preventive actions.
- Communication plan: The EIA reports several activities carried out by ADI-NQN and by GO
  to inform and educate the community, its political representatives and the local and
  provincial media, on the project's characteristics, global benefits to the electrical system
  and particular benefits to the community.

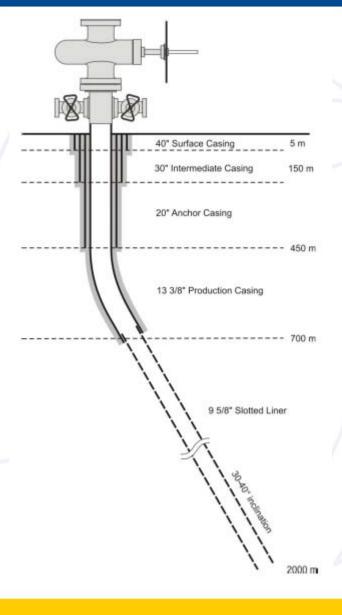
The above resource estimates have been prepared by Jun Seastres and Zim Aunzo under the direction of Brian Lovelock (Practice Leader and Senior Geochemist), full-time employee of Sinclair Knight Merz Limited (SKM), who takes responsibility and is accountable for the report as a Qualified Person in terms of the Canadian Geothermal Code. Brian has 32 years experience in the geothermal industry and is a member of the International Geothermal Association. SKM is a corporate member in good standing with the Canadian Geothermal Energy Association and has a Code of Ethics. SKM has been engaged as Consultant by Earth Heat but holds no financial interest in the project or in Earth Heat.

### Cont...



#### Concept Study (Pre-feasibility)

- Environmental considerations were addressable without major cost incursions
- Low noise emissions tested low profile needed topographically
- Two plant locations under consideration
  - Minimising pipeline length, temperature and pressure loss a priority
- Drilling considerations
  - Largest impact on cost considerations
  - Locate wells in areas of high calculated productivity based on well data
  - A 15MWe plant could be sustained by just two wells initially
    - Budgeting for 4 at the end of 2012
  - Big hole design warranted given previous intersections of vapour reservoir
  - Deviated drilling to maximise intersection of fractures (productive reservoir), kick off at circa 300m, angle build up of 3 degrees per 30m and final inclination of 35 Degrees to achieve a throw of circa 300m



#### POSITIVE ECONOMIC RESULTS

### Cont...



#### Commercial

- Letters of Intent to enter into binding Power Purchase Agreements signed with 2 entities
- Total of 40MWe
- Anticipated significant additional demand for electricity in Argentina (refer later slides)
- EHR cornering some of the better offtake partners in Argentina, making sure we have the highest quality agreements, thus ensuring financability

#### Financing

- Announced syndicated Senior Debt of a total of \$134m USD, with an initial order of \$48m USD coming from the lead bank, Inter American Development Bank ('IADB'). Work on this continues productively in the background towards formal close.
- Junior Debt, or Mezzanine of \$22.5m USD through Corporación Interamericana para el Financiamiento de Infraestructura ('CIFI'). This will pay for 75% of the drilling at Copahue in 2012/2013. Recently announced but due diligence run concurrently with Senior Debt thus progressing towards contemporaneous close.
- Capital Contingency Finance of \$17.5m AUD, which addresses a number of issues within the capital structure and provides execution certainty.

### EHR Activities to date



- ✓ Appoint world class local team
- ✓ Commissioning Independent Experts
- ✓ Resource Certification
- ✓ Environmental Impact Assessment (stage 1 of 2)
- ✓ Concept study on plant size and timeframes
- ✓ Power Purchase Agreements (PPA) letters of intent
- Bankable Feasibility Study
- Power Purchase Agreements negotiated and signed
- Formal close of Financing
- Long lead items (plant & equipment)
- First site works
- Drilling

#### National Grid 500kV





- Total length: 14.000 km
- Line Comahue (NQN)-Cuyo is in operation since 02/09/11 (testing step – not official opening yet)
- Distance Comahue (NQN)-Bs.As. about 1200 km.
- Long lines require stability device protections

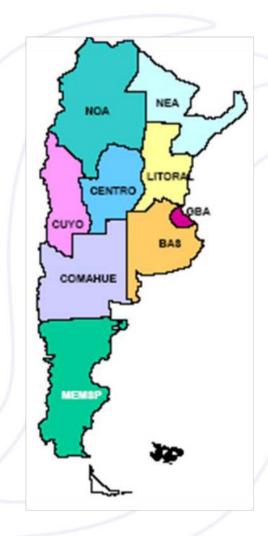
# **Energy demand**



REGION	GWH - 2010	Part.%		
Buenos Aires (Province)	BAS	13683	12%	
Centro	CEN	9787	9%	
Comahue	СОМ	4278	4% 6%	
Cuyo	CUY	6766		
Buenos Aires (Capital)	GBA	43957	40%	
Litoral	LIT	14314	13%	
North East	NEA	6223	6%	
North West	NOA	8797	8%	
Patagonia	PAT	2970	3%	
	TOT	110775	100%	

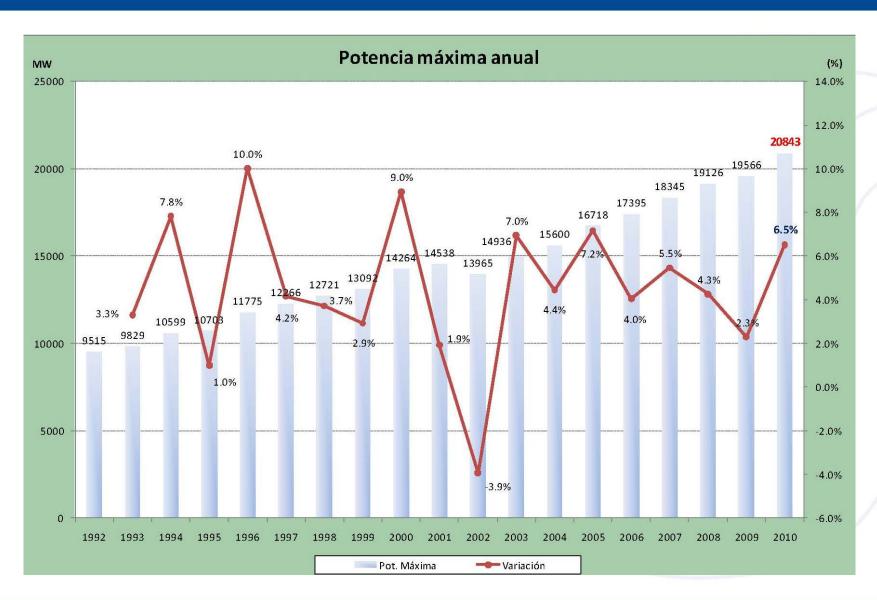
#### Comments:

- Demand of GBA reaches the 40% of the total demand
- Areas COM and NEA, with the biggest hydro plants, require only 4% and 6% of the total demand
- → The transmission lines are essential in transporting required energy from COM and NEA to GBA



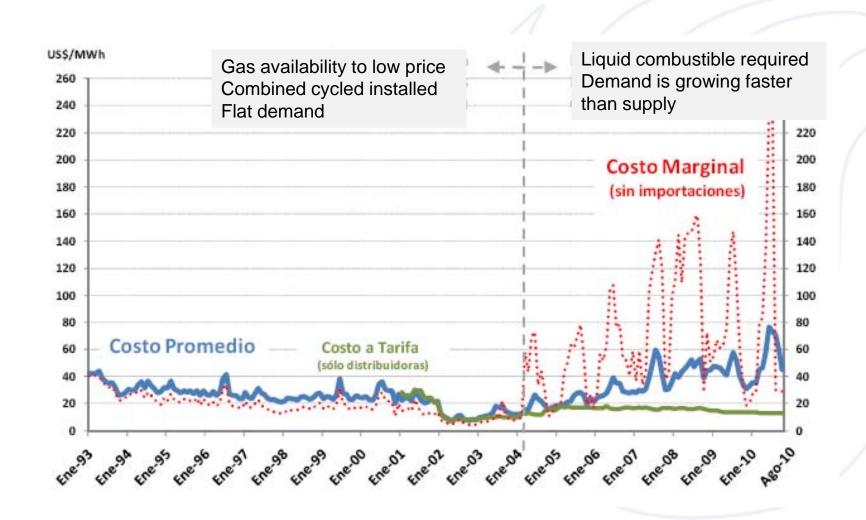
#### **Peak Load Evolution**





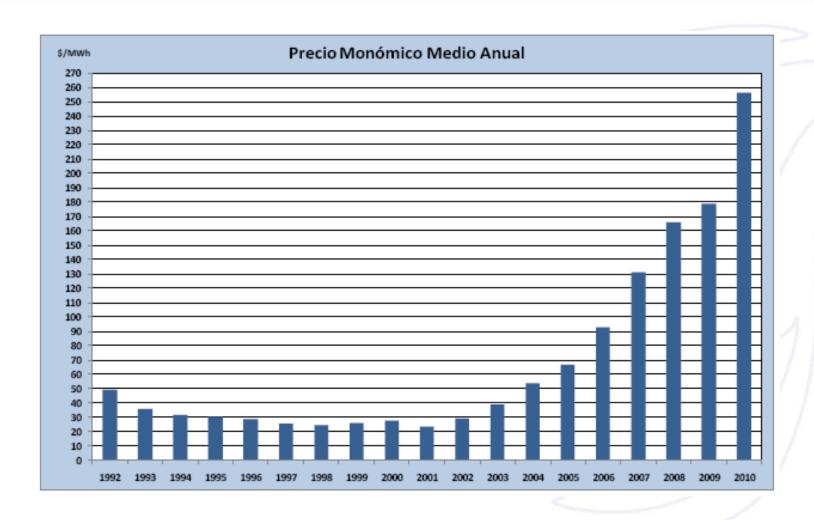
## Evolution of the prices





# Growing prices (AR\$)

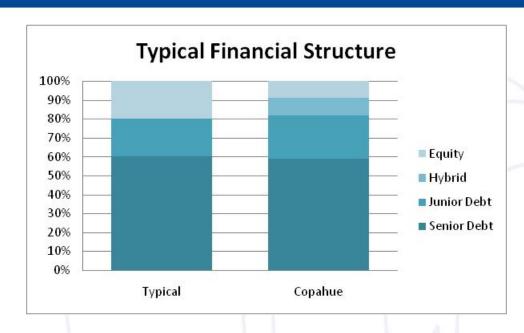




## Pushing Forward- Finance



- In general terms project finance is accessible for those developments using existing technology, with proven resources, a business plan, and commercial output.
- Geothermal financing has been around for 50 years, this is nothing new
- EHR simply has a project that debt lenders have some comfort with



- Drilling Done
- PPA (LOI) Done
- Pre-Feasibility Done
- Indicative financing Obtained
- To close, we will invest the balance, no other ASX listed Contemporary is close

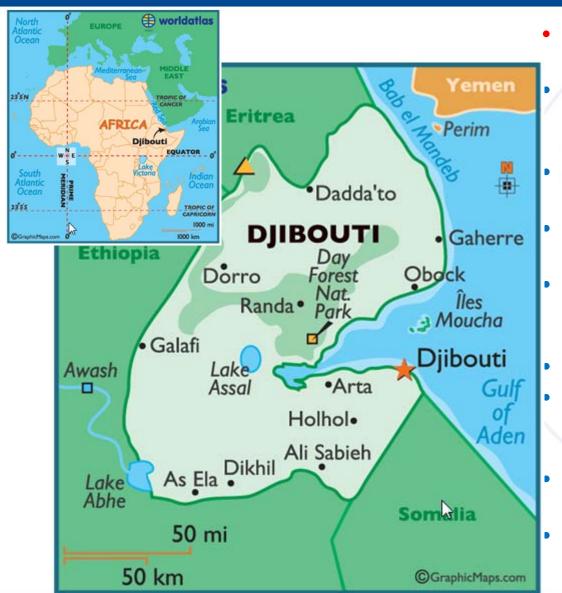
# Bulldozing



- EHR has performed well ahead of its peers in the business of defining a location suitable for a geothermal power plant.
  - Will install a power plant, is not taking upstream risk for investors equity
- EHR is expecting a higher demand from customers in Argentina for electricity, thus is an expanding business.
- EHR is expecting additional announcements on financing
- EHR will introduce partner companies to opportunities in Argentina if it makes sense for shareholders.

# Fiale Project





- A similar very high quality, quantifiable project like Copahue
- Stable country (former French colony), with significant western military presence
- Power poles constructed to access national grid
- Sealed bitumen road to site from Djibouti City- 2 hour drive
- Located in a lake, lowest point in Africa, a source of fluids and water exists
- Towns nearby with range of facilities.
- Considerable services available both from the Middle East and from Continental Africa
- Industrial and potentially mining customers with pent up demand
- Large populations in neighbouring Somalia and Eritrea

# Significant Progress



#### Djibouti

- Progressing discussions with JV Partners and potential Co-Developers of critical path projects
- Activity to ramp up with a resource review in the first quarter of 2012
- No significant costs to be incurred without a Joint Venture partner

#### Kenya

- Considerable time and effort in project generation
- Applied for a specific area with very high prospectivity and market benefits
- Extremely promising discussions with large partner companies, which will enable EHR to take part in world class, company making projects with considerably lower risks than would otherwise be possible.

#### Australia

Consolidating the portfolio and reducing overhead exposure

## Peer Comparison (Volcanic)



Geothermal Stocks	ASX Code	Market Cap \$m	Volcanic Resources	Drilling Information?	Pre-Feasibility or equiv?	Project Finance?
Geodynamics	GDY	69		N/A	No	No
Petratherm	PTR	13		No, 2012	No	
						No
Earth Heat Resources	EHR	20	264MWe <sup>(1) (4)</sup> 150MWe <sup>(1) (4) (6)</sup>	<u>YES</u>	YES	YES
Green Rock Energy	GRK	5		No	No	No
Panax Geothermal	PAX	6	165MWe (4) (5)	<u>YES</u>	No	No
Hot Rock	HRL	17	320MWe (2) (3)	No	No	No
Greenearth Energy	GER	7		No	N/A	No
KUTh Energy	KEN	5	83MWe <sup>(3)</sup>	No	No	No
Torrens Energy	TEY	5		N/A	No	No

Notes: (1) Earning interest in projects via funded exploration & development programs (2) HRL resources from 2 Chile projects (3) Code compliant assessment (Australian Geothermal Reporting Coded 2010 2<sup>nd</sup> Edition) (4) Non code compliant Resource (5) Panax is farming into a 60 MW project and has 106MW in 2 projects (6) MOU Signed Development Target – Classified Resource not Released . This is only representing volcanic associated projects within a company portfolio, not other forms of Geothermal. **Source: Company Websites and ASX Releases** 

## A Utility That Nobody Knew..



- EHR is approximately 2 years away from first cashflow
- EHR is the sole company in its sector with Project Finance well underway
- EHR is the sole company in its sector that has a growth engine thats been proven, not just by history, but by the Company – It can continue to expand through judicious project selection and expansion of existing operations.
- EHR is a Utility Company which leverages its shareholders into very high value projects.
- EHR expects material developments over the next 12 months will shake the foundations of perception again, but in a positive fashion.

## **Contact Details**



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