

Gunnar Þór Gunnarsson
Chief Operating Officer
GGDP Roundtable 2014



Overview

- **Reykjavik Geothermal (RG) is a Geothermal Development, Consulting and Investment Company Focused on Emerging Markets**
 - Founded by one of the World's leading geothermal management teams, RG is led by CEO Gudmundur Thoroddsson, former CEO of the world's largest geothermal development company
 - Joined with a world-class finance team, led by former Deutsche Bank Board Member, Credit Suisse EMEA CEO and current RG Chairman Michael Philipp, RG believes it is a best in class developer with end to end technical, operational and project finance capabilities.
- **Geothermal Energy is One of the World's Most Compelling Energy Sources**
 - Where high quality geothermal resources exist, they can provide some of the world's cheapest base load power and are complimentary to any grid
- **RG has an attractive portfolio of geothermal development opportunities focused on the best geothermal areas in the world**
 - Two 500 MW projects in Corbetti and Tulu Moya, Ethiopia that already have PPA HOT's completed
 - A 30 MW project in Mexico with expansion potential to 100MW
 - A 15 MW project in St. Vincent & the Grenadines with potential for expansion and regional export
 - A 30-100 MW project with a private offtaker in Northern Ethiopia
 - Pipeline opportunities in East Africa, Latin America and the Caribbean totaling over 1,000 MW

RG Led by world-class geothermal, finance and industrial executives

Gudmundur Thoroddsson



- CEO, RG
- 30+ Years of experience energy & utilities
- CEO, Reykjavik Energy (RE) & Reykjavik Energy Invest (REI)
- Chairman, Icelandic Drilling Co. & Board Member, Enx China

Michael Philipp



- Chairman, RG
- 25+ years of experience in finance
- Chairman and CEO, Credit Suisse Europe, Middle East, Africa; Chairman and CEO, Asset Mgt of Deutsche Bank
- Board Member, World Wildlife Fund

Dr. Carl Hahn



- Vice Chairman
- 50+ years of experience in automotive and industrial sectors
- Former CEO and Chairman of Volkswagen AG and Continental AG.
- Currently a board member of Audi, Seat and Skoda and senior advisor of General Capital Group.

Advantages of Geothermal Energy

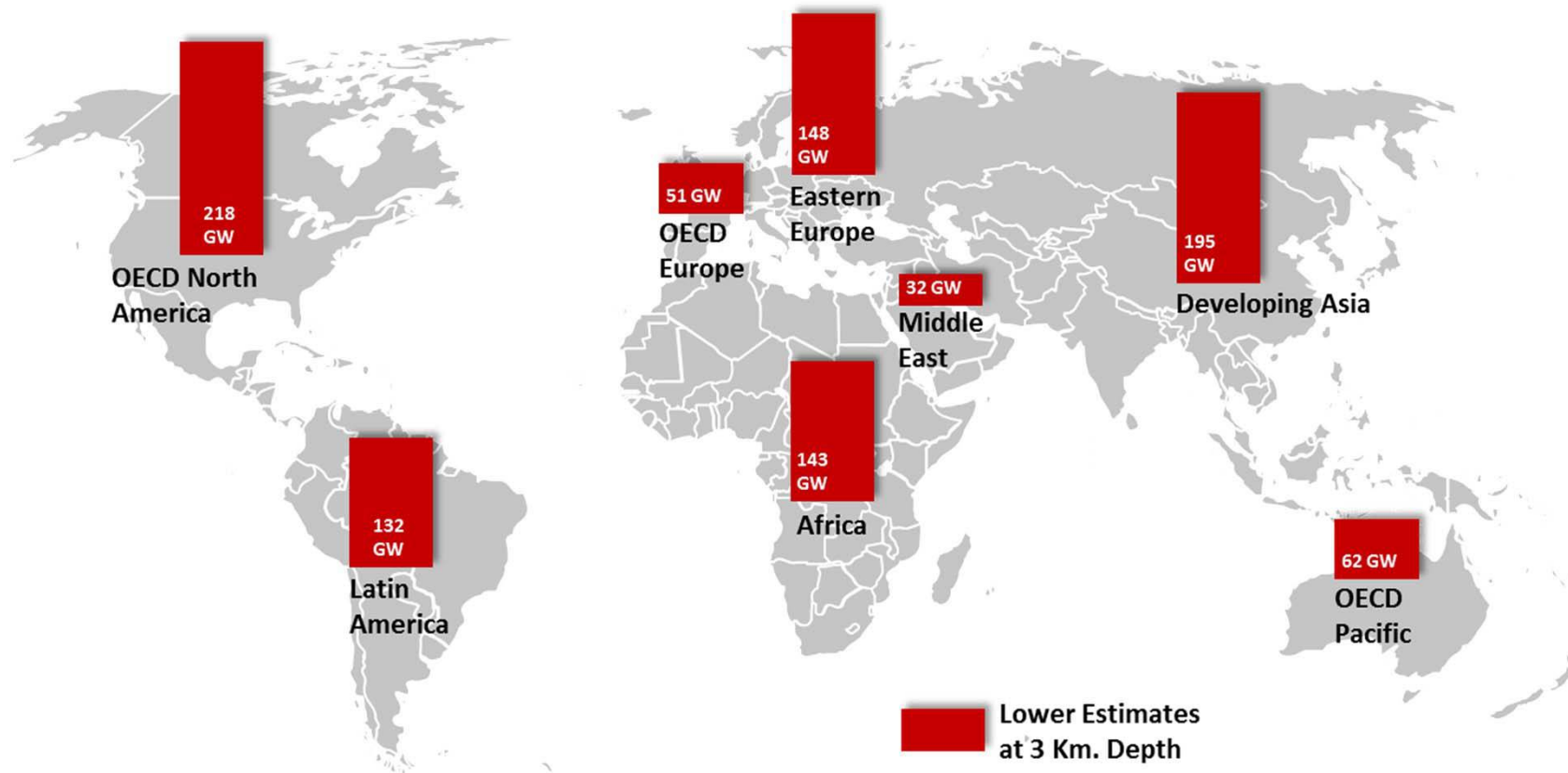
Renewable Energy Challenges

Geothermal Advantages

High Costs		Low Cost	Cost-competitive with coal and natural gas, and cost-advantaged to other renewable sources
Unstable Yield		Base-Load Power	Operates at 95%+ capacity factor or 24/7 up-time
Large-Scale Land Needs		Small Geographic Footprint	Lowest land use per MW of any renewable energy source, and minimal environmental impact compared, for example, to large scale hydro
Evolving Technologies		Mature Technology	Well-proven steam power generation technology - the first geothermal plant built in 1904 still in operation today (Lardarello, Italy)
Limited Off-Shoot Industry Potential		High Off-Shoot Industry Potential	In most countries with geothermal development various off-shoot industries have developed, e.g. spas & tourism, food processing, district cooling and industrial heating

IPCC 2012: Less than 1% of the World's Geothermal Resources are being utilized

International Panel on Climate Change: World geothermal technical potential in 2013 (GW)

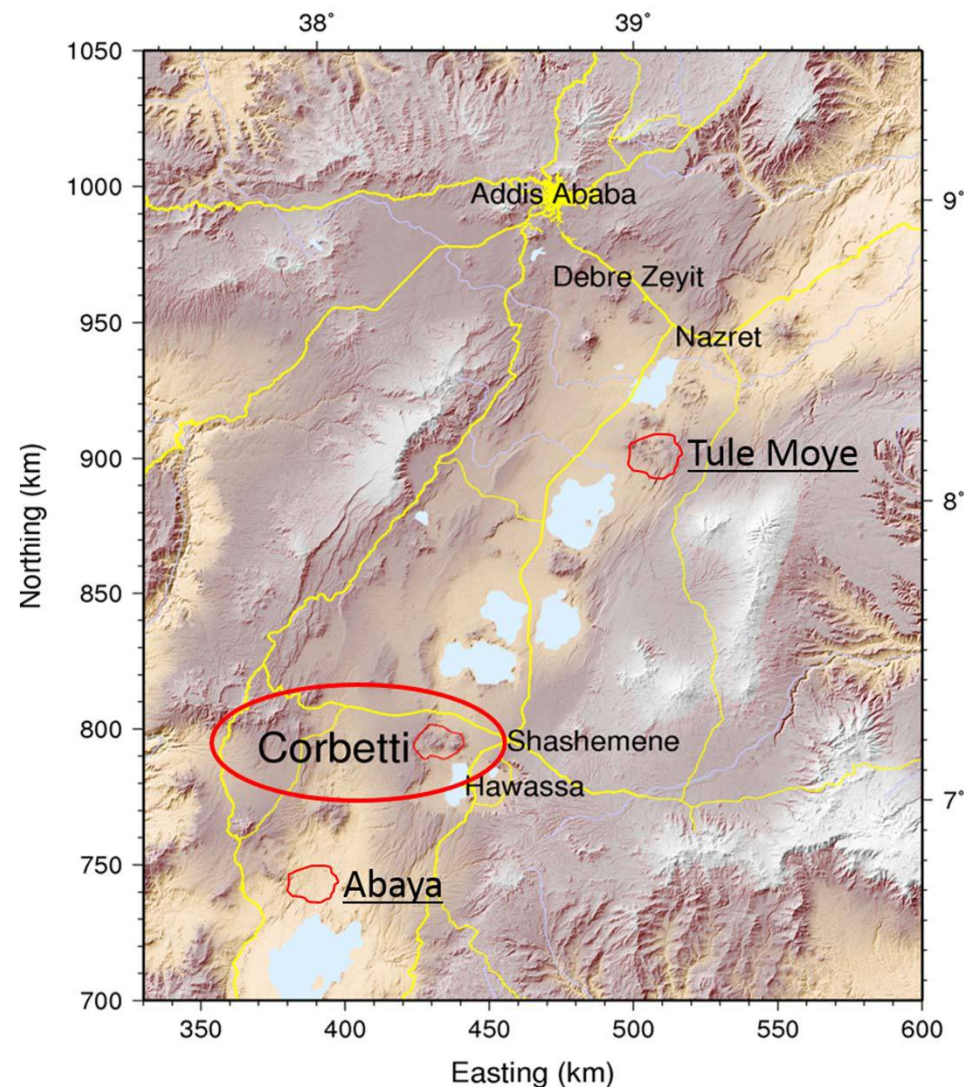


Less than 1% of global geothermal technical potential has been harnessed

Global Geothermal Technical Potential Map (in GW) with lower estimates. (Here without Enhanced Geothermal Systems Potential). With capacity factor 90%. Source: Intergovernmental Panel on Climate Change IPCC 2012 and calculations of Icelandic Geological Survey - ISOR January 2012.

The Corbetti Prospect: Location

- The Corbetti geothermal prospect is considered vast and may be larger than many existing Kenyan calderas
 - Located in the Southern Rift Valley with highly visible resource potential, abundant steam on surface.
 - Close to Ethiopia's only geothermal power plant (the 7 MWe Aluto-Langanot Plant), various hydro plants, major highways, and the backbone of EEPCo's (and the East African Power Pool's) transmission infrastructure
 - Relatively flat land with road access inside a large caldera, 15 minutes from the city of Sashemene (a regional capital with hotels, an Ethiopian Geological Survey operation centre, etc)



RG: Leading the Charge in Power Africa

- **President Obama's Power Africa** initiative is a major development push to double electricity access in Africa
- Through 2018, the **U.S. Government has committed more than \$7 billion** in financial support and loan guarantees, and **has attracted another \$19 billion from DFIs and private sector entities**¹
- **RG has been recognized by USAID and OPIC as one of the leaders of the US Power Africa initiative:**
 - Corbetti was the **first Power Africa initiative announced** by the US Government and is prominently featured in the USAID 2014 Power Africa annual report
 - **At 500 MW and \$2B, Corbetti is the largest independent power project in Africa**, consequently making it the largest Power Africa project²
 - **Next year, RG's Tulu Moyo project will match Corbetti as the joint largest IPP in Africa**
 - RG's Ethiopian Geothermal Projects represent over 35%³ of the 8 generation projects supported by Power Africa to date



¹ <http://tinyurl.com/Corbetti-WashingtonPost>

² <http://www.usaid.gov/sites/default/files/documents/1860/power-africa-overview.pdf>

³ <http://www.whitehouse.gov/the-press-office/2014/08/05/fact-sheet-powering-africa-increasing-access-power-sub-saharan-africa>

RG: Leading the Charge in Power Africa



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FIRST POWER AFRICA TRANSACTION MOVES FORWARD WITH LANDMARK AGREEMENT BETWEEN ETHIOPIAN GOVERNMENT AND REYKJAVIK GEOTHERMAL

1000MW Facility will be Largest Geothermal Plant in Africa

For Immediate Release

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USAID Press Office



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Making a Power(ful) Impact on Ethiopia

By Robert Savers

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Insights from Administrator Rajiv Shah

ENERGY

Pooling Resources to Bring Power to the Developing World

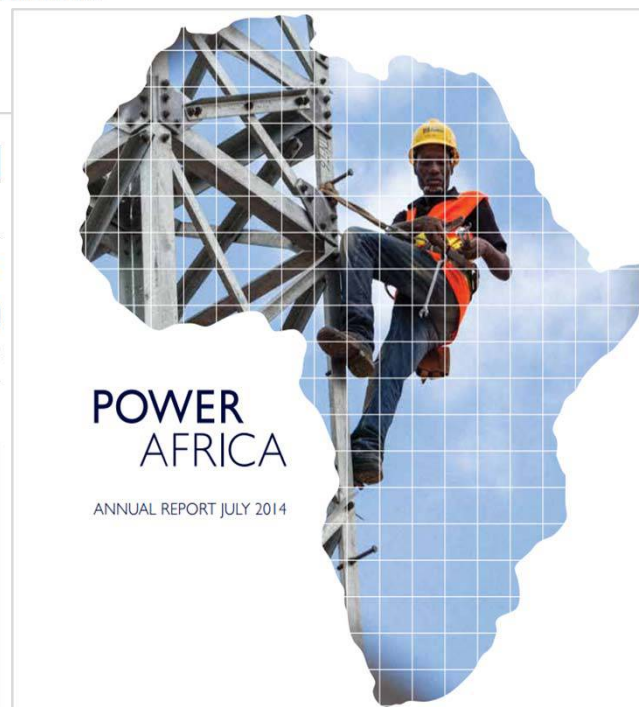
Making a Power(ful) Impact on Ethiopia

Electricity Sparks Life into Northern Haiti

Q&A: Andy Herscovitz Talks Power Africa

Badhasso Dubee, center, with other Corbetti residents

Robert Savers, USAID



Catalytic Transactions: [...] The Government of Ethiopia expressed interest in establishing its first independent power producer (IPP) to tap into the country's geothermal potential. The proposed Corbetti Geothermal project will increase the country's current generation capacity by about 50%. [2] As the first private sector investment in energy in Ethiopia, the Corbetti project paves the way for future investment while also providing a cleaner source of power.[2]

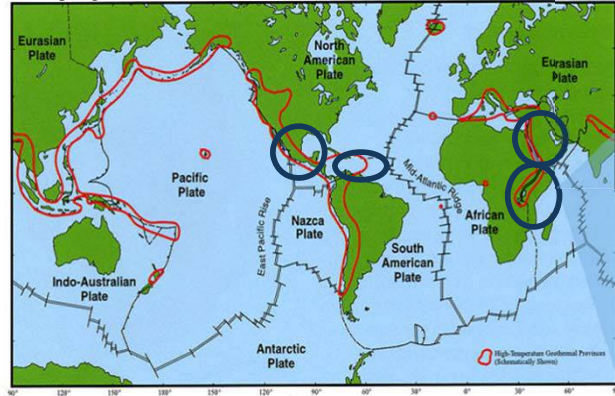
Power Africa Annual Report (http://www.usaid.gov/sites/default/files/documents/1860/USAID_PowerAfrica_AR_July2014.pdf)

First Power Africa Transaction (<http://www.usaid.gov/news-information/press-releases/sep-27-2013-first-power-africa-transaction-moves-forward-landmark-agreement>)

Making a Powerful Impact on Ethiopia (<http://www.usaid.gov/news-information/frontlines/energy-infrastructure/making-powerful-impact-Ethiopia>)

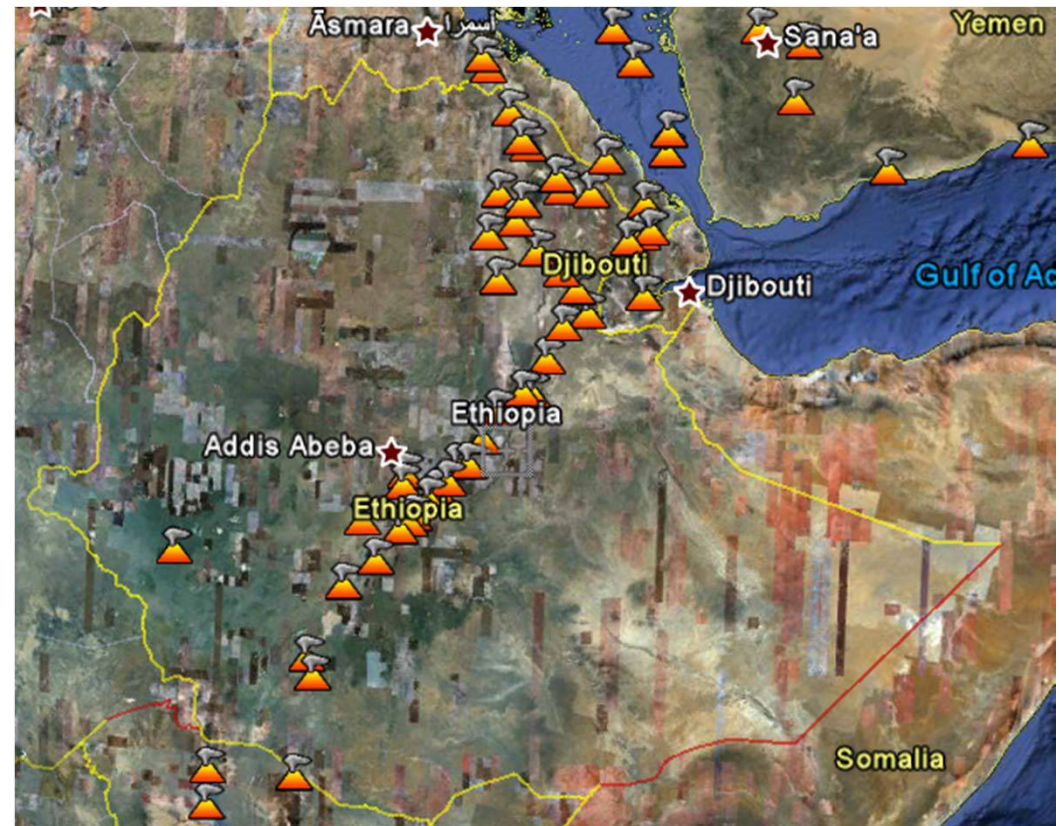
Ethiopia's Huge Geothermal Potential

Reykjavik Geothermal Focus Areas



- Ethiopia has potential for thousands of MW of clean, sustainable and affordable power
- Geothermal power generation can:
 - Be highly compatible with existing hydro-electric power infrastructure, as demonstrated by the Icelandic example
 - Become one of Ethiopia's cheapest energy sources
 - Provide thousands of MW of base load power needed to sustain population of 90M and continued double digit economic growth
 - Reduce emissions on country and regional level

Volcanoes of Ethiopia



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