LWANDJOFU BIOGAS TO POWER PROJECT – AEF 2024

UNTAPPED ENERGY MARKET
IN A NATURAL RESOURCE RICH COUNTRY

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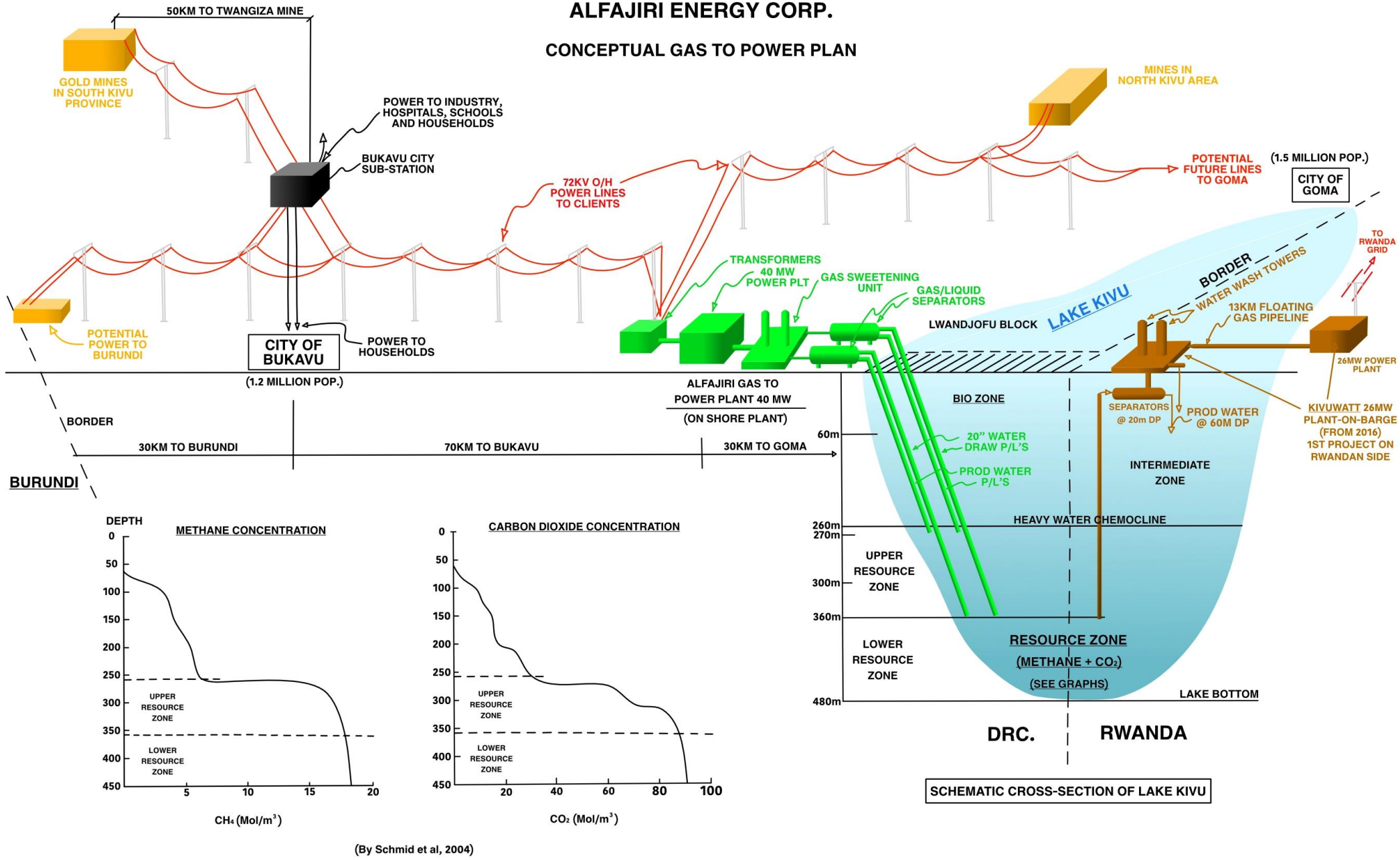
Presentation Overview

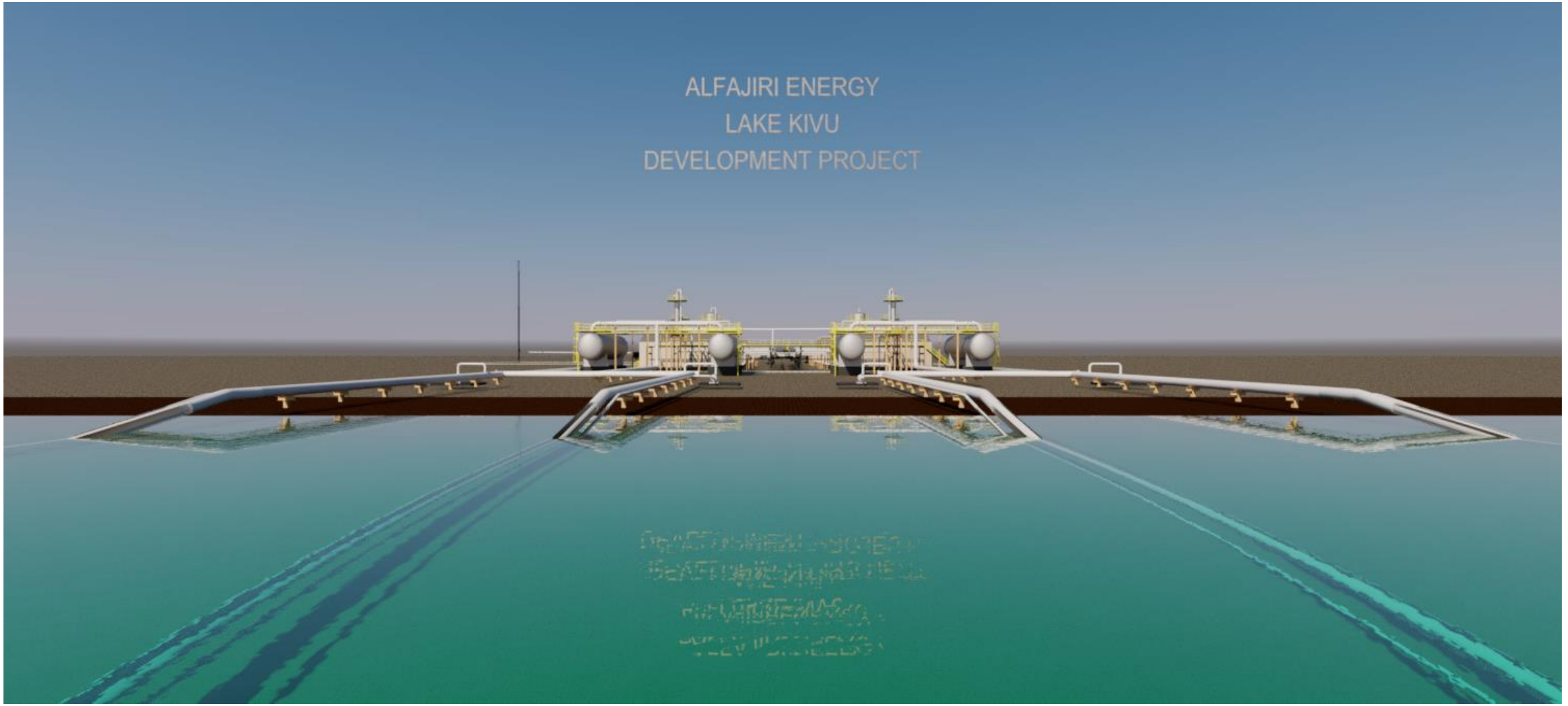
- Project conceptual plan
- Pre-conference panels organized by Canadian Trade Commissioners
- Conference Day 1 to 4: One-on-one introductions and B2B sessions
- Conference Day 2 Project Pitch Session organized by Canadian Trade Commissioners
- Conclusions & Recommendations

ALFAJIRI ENERGY CORP.

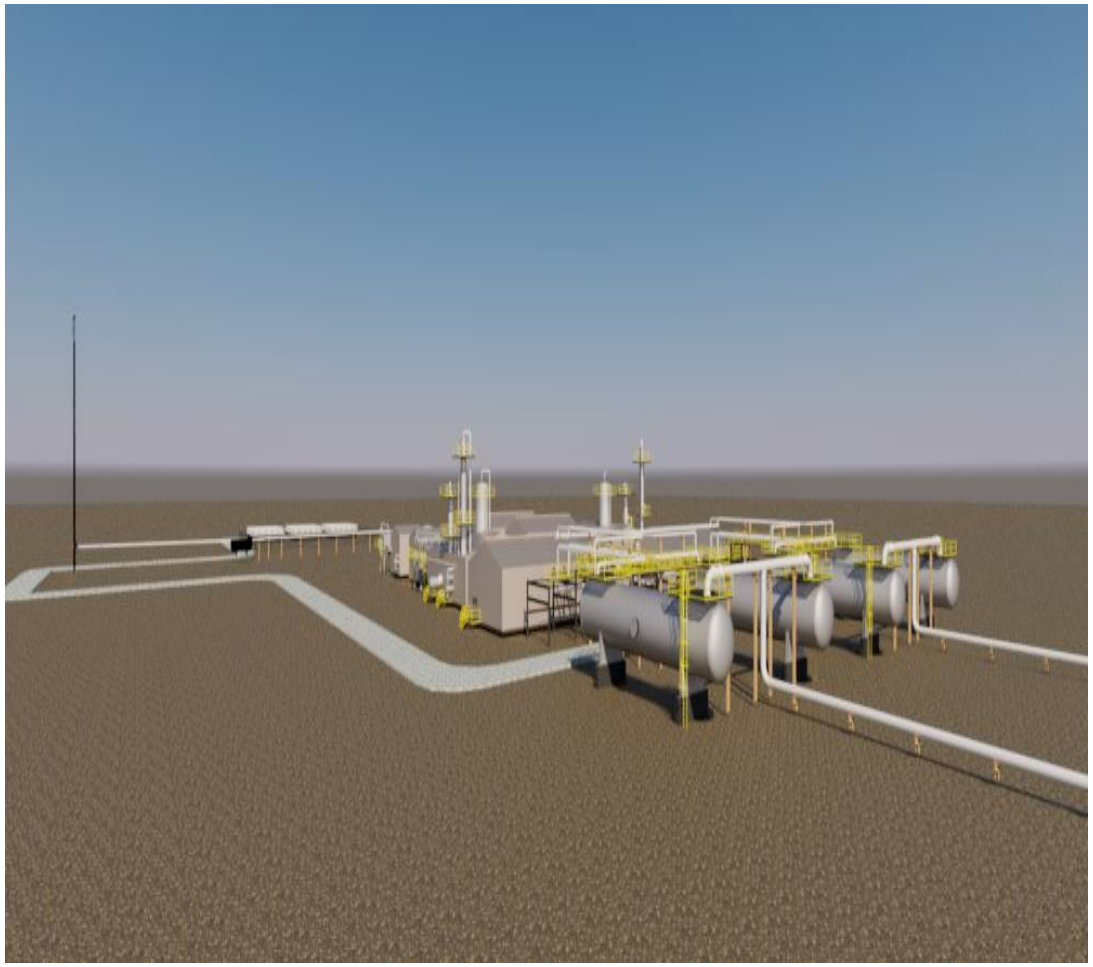
CONCEPTUAL GAS TO POWER PLAN



Project Conceptional Plan - View from Lake Kivu



Gas Extraction Conceptional Plan - View from Above

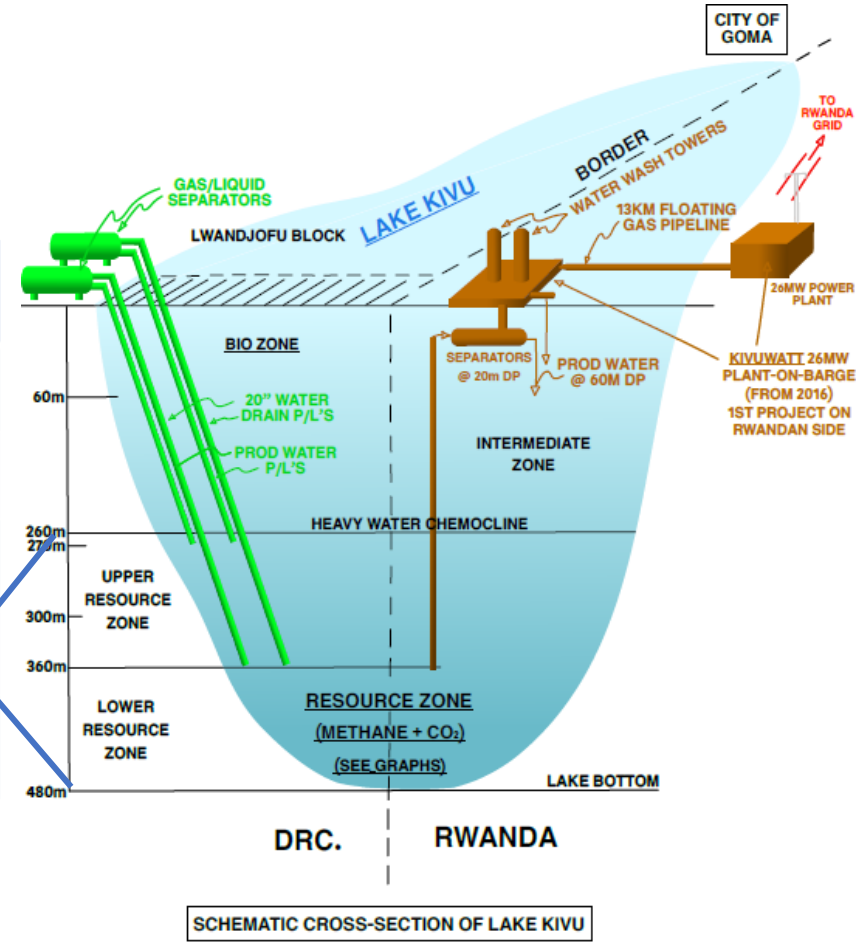


L Block Renewable Biogenic Gas Reserves

- Estimated renewable gas in place in L Block: 10 to 11.3 billion m^3 (0.35 to 0.39 Tcf)
- Methane (CH_4) comes from biodegradation of plants and microbial conversion of CO_2 into CH_4
- CO_2 comes from volcanoes through fissures created by tectonic movement

Published gas resource estimates by water depth:

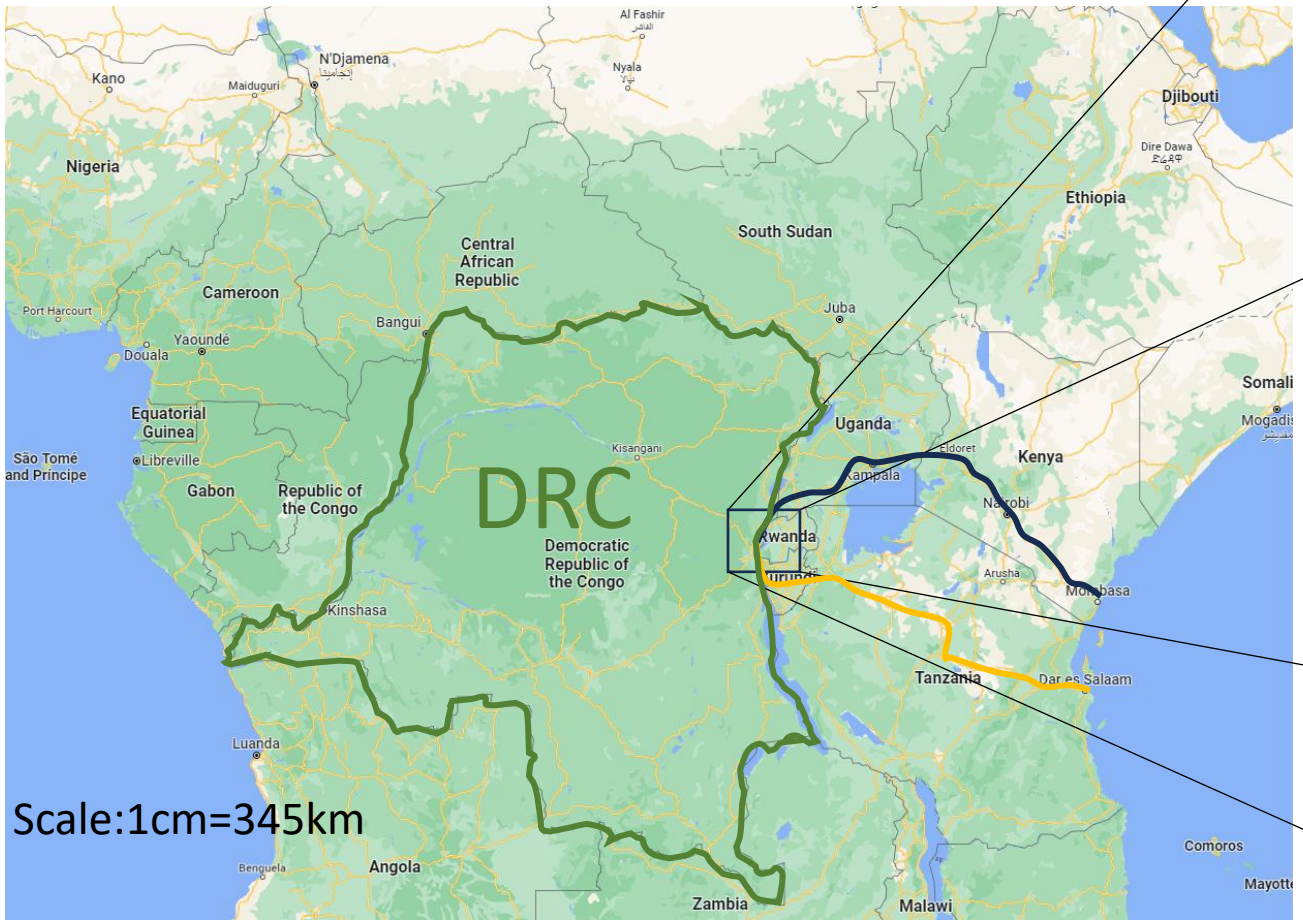
Zone / Dataset	Tietze (1974)	Schmid et al. (2005)	Eawag (2018)	Average
Biozone (0-60 m)	0	0	0	0
Intermediate Zone (60-200 M)	1.14	1.23	1.46	1.28
Potential Resource Zone (200-260 m)	1.07	0.97	0.77	0.94
Resource Zone (260-485 m)	7.29	9.09	8.48	8.29
Block L	10	11.30	10.71	10.67



SCHEMATIC CROSS-SECTION OF LAKE KIVU

Project Location Map

Project: extract non-fossil renewable biogenic methane from the waters of Lake Kivu in eastern part of the DRC

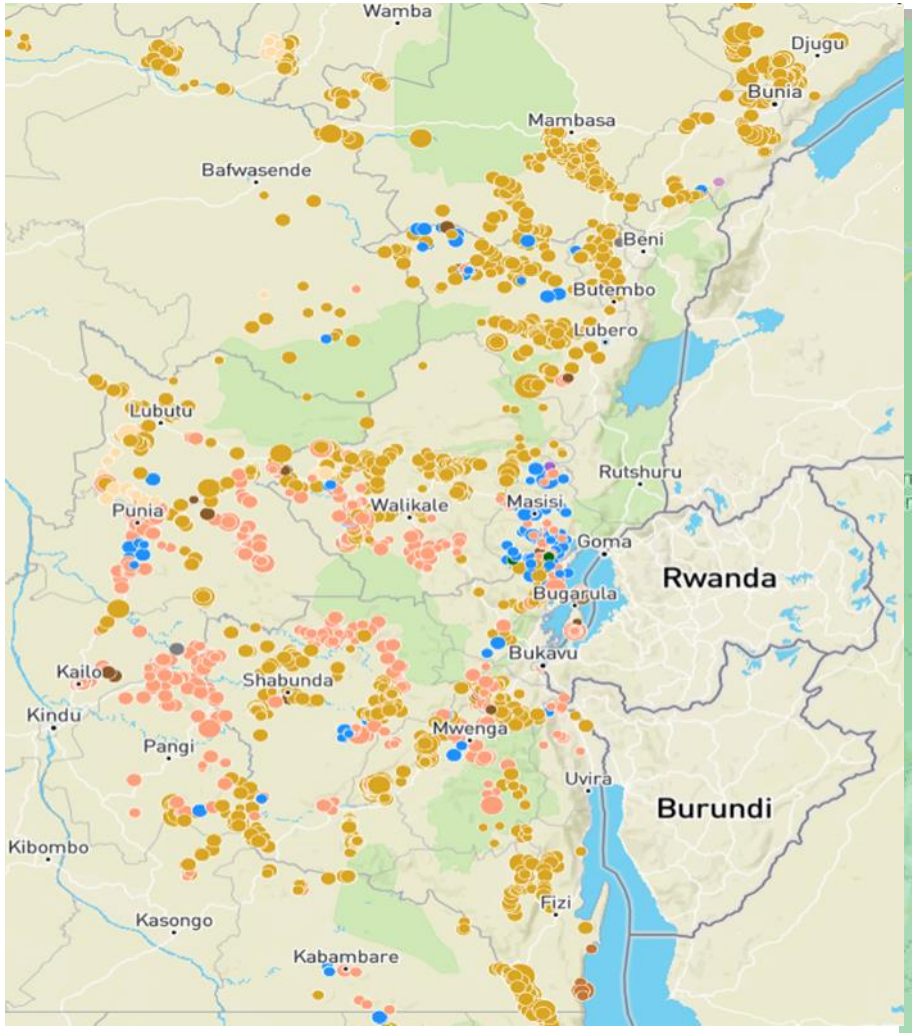


Access road through Mombasa, Kenya

Access road through Dar es Salaam, TZ

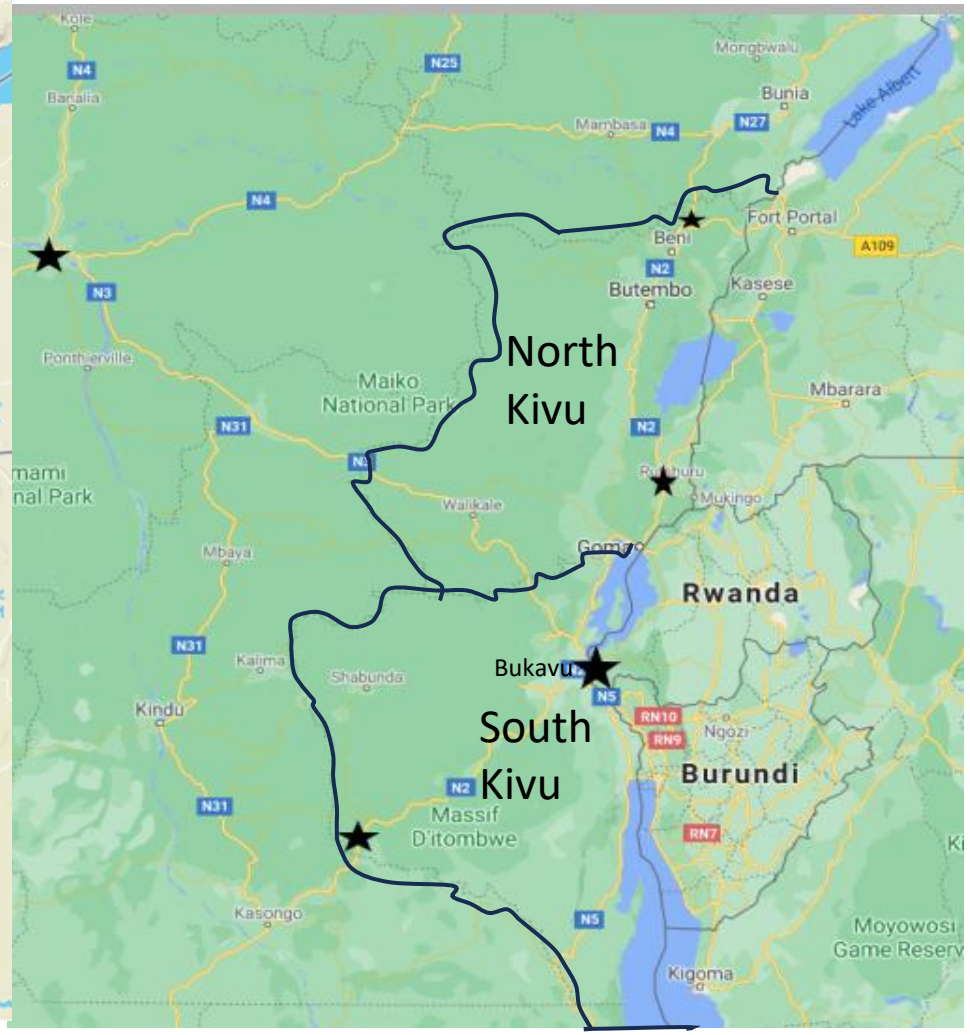
PROVIDE THE ENERGY NEEDED TO DEVELOP NATURAL RESOURCES, POWER FACTORIES, CREATE JOBS AND REDUCE POVERTY

Or: Jaune, **Coltan**: Blue, **Etain**: Rose



Source: https://www.ipisresearch.be/mapping/webmapping/drcongo/v6/#-1.792583110308982/28.615234375105956/6/4/1/

★ **Existing Hydropower Stations: very insufficient**



Source: https://www.google.com/maps/@-1.424577,26.286981,7z

- High density population area with considerable agro-industrial and mineral processing industry potential

Pre-Conference Panels Organized by Canada Trade Mission

- A panel consisting of:
  - A senior world bank energy program manager for west and central Africa
  - A senior member of the African Development Bank
  - A representative of Power Africa Initiative
  - A senior world bank regulatory policy specialist

Summary of Discussions

- Significant effort (governments, private sectors and international organizations) has been made toward increasing the rate of electrification in Africa
- The World Bank has dedicated 3 billions annually and plans on increasing it to 5-6 billions
- Power Africa goal is to complete 60 Giga Watt projects across the continent by 2030.
- The world bank is working with African governments to have the regulatory framework to support investment in power industry and grid connectivity between countries

Pre-Conference Panels Organized by Canada Trade Mission

- Second panel consisting of:
  - Power Africa coordinator
  - A senior member of US energy department
  - A senior USAID director
  - A Power Africa representative based in South Africa

Summary of Discussions

- Power Africa is a US initiative embedded in the USAID started by Barack Obama
- Power Africa works with private, governments, government agencies and international organizations to achieve its goal.
- Power Africa membership is non-binding.

Pre-Conference Panels Organized by Canada Trade Mission

- Third panel consisting of:
  - JCM a Toronto based power company with operations in Malawi, Tanzania, Nigeria and Pakistan
  - A WSP (Canadian engineering consulting company)
  - A FinDev representative
  - A senior manager of procurement at Export Development Canada (EDC)

Summary of Discussions

- Canada is engaged through FinDev Canada and EDC
- JCM is an example of Canada engagement operating company based in Canada.
- There is tremendous business opportunity for Canadian companies in relation with Africa electrification goal.

Day 1 to 4: One on one Intro and B2B Sessions

- As this was the first time to attend such an event the primary goal was to:

  - Establish communication with a point of contact
  - Introduce the project with the goal of following up later with the point of contact
  - Learn about engagement process, requirements and timelines
  - Learn about regional dynamics & hubs (South Africa, Nigeria, Kenya, Egypt)

Day 1 to 4: One on one Intro and B2B Sessions

- All players including banks, companies and agencies were present.
- Three days were not enough to seat down and exchange with each potential partner.
- Managed to hit main targets.
- Obtain significant information on projects under development across Africa and the main
- Obtain market intelligence on regional power prices, demands and supplies
- Importance of working under and being introduced by the Canadian trade mission since other countries (England, EU, Sweden, Finland, Denmark, Germany) were also represented!
- US and France were represented by major corporations and sponsors of the event

Day 2: Project Pitch Session organized by Canadian Trade Commissioners

- Selected development banks were invited to attend.
- Our presentation drew some interest from EU investment bank and Afrexim bank.
- Learned about other Canadian companies with projects
- Canadian companies' involvement is still very insignificant and scattered across the continent

Conclusions and Recommendations

- Electrification of Africa presents significant business opportunities for Canadian companies.
- Risk perception is preventing Canadian companies from taking advantage of a huge market.
- Local and regional dynamics knowledge will be key to successful investment in the electricity industry in Africa
- Canadian trade missions are under utilized, but represent a major tool for successful investment in the sector in Africa.

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THANK YOU!