Global Perspectives on Climate Finance

Amy Galland, PhD MBA
Principal, Empower Venture Partners
“... meeting the 1.5 degrees Celsius temperature target will require bringing carbon dioxide emissions to net zero by mid-century and dramatically reducing emissions of other heat-trapping gases.

This calls for transforming our energy economy and transitioning away from fossil fuels by greatly ramping up energy efficiency and embracing renewables and other low-carbon energy sources.

“While nations offered plans in Paris to reduce their emissions, current pledges are nowhere near enough to meet the Paris Agreement’s principal goal. Even if nations live up to their commitments, the planet will still be on a path to warm about 3 degrees Celsius. This is unacceptable.

~ Peter Frumhoff, Director of Science and Policy, Union of Concerned Scientists
How much investment is needed?

• $2.4 trillion USD/year through 2035

How are we doing?

• The current rate of investment in combating climate change is half that \(^1\)
• There is an additional annual gap of $2.5 trillion in financing the SDGs in developing countries \(^1\)
• In 2017, approximately $300BN was spent on renewable energy \(^2\)

Source: 1 World Economic Forum
2) Bloomberg NEF
“... the world is currently not on an emissions trajectory aligned with the long-term goals of the Paris Agreement, and so countries must do more to ratchet up the ambition of policies to drive down heat-trapping emissions.”

~ Rachel Cleetus, Policy Director and Lead Economist, Union of Concerned Scientists
How much more will it take?

• According to Future Earth, the global energy system can be transformed via a reallocation of the investment portfolio, not a major increase in investments

• In order for this to work, ”new investments in clean energy must significantly surpass fossil-fuel investments between 2020 and 2025”

Source: Exponential Climate Action Roadmap
Who is funding sustainable solutions?

• Private Sector: corporations, banks, private investments
  • Investments into clean energy and sustainable development projects
  • Green bonds (private and public)

• Governments
  • Contributions to international programs
  • Direct domestic investment and subsidies
  • All nations and states involved in carbon pricing and markets

• Development Banks and Aid Organizations
Who is funding unsustainable solutions?

• Corporations
  • Ordinary Business
  • 90% of world’s 200 largest companies maintain ties with industry associations that actively oppose leadership on climate change

• Governments
  • Government subsidies of 0.5 trillion USD/year to oil, gas, and coal, estimated impact of 5.3TN annually

• Banks

• Development Banks and Aid Organizations

Source: 1. Greenbiz 2) Future Earth
Investment break-down:

• “Multilateral development banks and the public finance institutions of G20 countries provide almost four times as much finance to fossil fuels than to clean energy in an average year.
• This translates to an average of $71.8 billion per year between 2013-15 in public finance for fossil fuels, compared to just $18.7 billion for renewable energy (that doesn’t have negative environmental and social impacts), from the same institutions and world leaders that have committed to achieving the aims of the Paris Agreement.

Source: Oilchange International, Friends of the Earth, Sierra Club
Global Energy Investments 2017, $1.8 trillion

- Electricity Networks (incl Storage): 17%
- Renewable Energy: 17%
- Coal, Oil, & Gas Supply: 44%
- Energy Efficiency: 13%
- Fossil Fuel Generation: 7%
- Nuclear: 1%
- Other: 1%

Source: International Energy Agency

- Overall:
  - 60% went to fossil fuels
  - 18% went to clean energy solutions
  - 11% went to energy access

Total: USD 59.5 billion

Source: Oilchange International

Source: Oilchange International
## Development Banks, Energy Finance 2014-2016

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<th>Development Bank</th>
<th>Fossil Fuel</th>
<th>Clean</th>
<th>Other</th>
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<tr>
<td><strong>Total</strong></td>
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<td>105</td>
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Source: Oilchange International
Impact of playing both sides

- Mixed messages to policy makers and the general public
- Justifications for further investment in unsustainable practices, energy generation, building, and transport
- $25TN USD in infrastructure at risk due to inaction
- Corruption in governments that further compromises political figures to take on personally lucrative fossil-fuel based projects instead of what is best for the future health and economics of their constituents
- Globally we move more rapidly to 1.5+ degrees
- The most vulnerable people have the most to lose
Leaves us a Future filled with Fossil Fuels: Approvals for Africa’s Energy Sector

Source: Oilchange International
Kenya Example: Lamu Coal Plant

• Kenya has 7,000 – 10,000 MW of geothermal resources

• Researchers at the University of California, Berkeley found that Kenya can have a “zero carbon emissions” electricity generation sector with increases of $3 – 7 USD/MWh by exploiting its geothermal and wind resources

• Despite community and international opposition, the Government of Kenya and Amu Power (with strong connections to AfDB) are going forward with a 1,050MW Coal Plant in Lamu
Arguments re Lamu Coal Plant

• Pros:
  • All developed nations used coal, why not us?
  • Big agencies fund coal and fossil fuels, why aren’t we getting some of that?
  • We have so little GHG emissions now, we can emit more

• Cons:
  • Not necessary for electrification
  • Abundant and cost-competitive geothermal and wind
  • Insufficient mitigation measures in ESIA
  • Not economical
  • Environmental and cultural damage
What can be done

• Corporations – slow to turn when their business models are dependent on climate-destructive products
• Banks – communicate long-term risk of fossil fuel investments to shareholders and
  • stop financing carbon-intensive projects immediately
  • Increase funding to projects that contribute to sustainable solutions
• Development agencies - internal discussions to shift the financing portfolios from fossil fuels to 100% sustainable solutions
  • Eliminate institutional hypocrisy
  • Align actions with messaging to truly support sustainable development and eradicate poverty
  • Signal to policy makers in developing countries that fossil fuel investments are not the way of the future
Thank you

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