



# Investing like the earth depends on it.

**“If the temperature goes up by 6 degrees, it doesn’t matter how much money you have. And it’s going to take a lot of money to keep it from doing that.”**

—  
**Andrea Nemtin,**

CoPower Investor and Partner at Rally Assets



At CoPower we believe the transition from an economy fueled by oil and gas to one powered by clean energy is not only the greatest challenge of our time, but also one of the greatest opportunities.

We know that in order to avoid catastrophic climate change, an annual \$2.4 trillion must be invested globally in clean energy, and that by the year 2050 all sectors of our economy must have achieved, or be close to achieving, decarbonization. The need to redirect capital from the fossil fuel industry to clean energy on a massive scale is urgent and leadership is needed not only from major financial institutions and governments, but also from individuals making decisions about how to invest their savings and pensions.

## **So what would it look like if we invested like the earth depended on it?**

As a financier of clean energy projects and an investment company for individuals seeking positive change, this is the question we've asked in shaping our approach to impact.

We're pleased to share our impact framework which represents our best thinking to date. As climate finance, policy, clean technology as well as CoPower's strategy and operational needs evolve, so too will our approach and this document will be revisited at least annually.

# Our Theory of Change



One of the obstacles standing between us and the clean energy future is a lack of financing. Reliable solar, wind, geoexchange and LED technologies that reduce carbon pollution, generate clean power and save energy are already available. Widespread deployment of these projects is crucial to address the 40% of global emissions that come from our built environment, however, financing remains a challenge, particularly for projects under \$20M.

As a small player in a complex market, we can't do everything, but we can be strategic in how we leverage small amounts of capital for outsized positive climate impact. In seeking to add value, we focus on an underserved segment of the market: distributed clean energy and energy efficiency projects.

**CoPower's role in Canada's clean energy finance ecosystem is to unlock private investment capital to finance and deploy clean energy projects at scale. We do this by connecting clean energy projects in need of financing with investors seeking to earn a good return while generating positive impact.**

# Our Impact Themes



**Reducing emissions:** Addressing climate change means making deep, fast emissions cuts. We aim to make project investments that are aligned with current climate science and low carbon trajectories. Each individual project and portfolio we finance or refinance must result in absolute GHG emissions reductions below a set baseline\*. In addition, CoPower is working to set benchmarks for various technologies and geographies that new project investments should meet—to be published in a future iteration of this document. Industry standards, e.g. the Climate Bonds Standard technical criteria, provide further guidance.

**Supporting systems change:** Our investments seek to lay the groundwork for the decarbonized energy system of the future. This means supporting scalable business model innovation like the energy-as-a-service model which allows for greater access to clean energy technologies; financing energy storage as a complement to renewable power generation; and supporting distributed infrastructure as we move toward a decentralized energy system in which power is generated close to home.

**Democratizing green investing:** Options for individual retail investors to participate in and profit from the clean energy transition are few and far between. We make loans and design our investment products to be suitable for individuals. This allows us to give Canadian investors of all sizes the opportunity, often for the first time, to invest in clean energy infrastructure, while our online investment platform allows us to reach those investors at scale. In addition to giving individuals real opportunities to shift their financial resources for positive climate benefits, we are working to support a broader cultural shift in how Canadians perceive money as an enabler of social change through educational events and content.

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\* The baseline refers to the building's carbon performance prior to the development of the clean energy or energy efficiency project.

# Our Impact Criteria



We use the following criteria and matrix to evaluate each new project investment opportunity and assess whether it aligns sufficiently with our impact goals.

- 1. Additionality:** Does the project investment result in the deployment of more clean energy infrastructure either directly or indirectly? Our financing should result in additional impact whether by catalyzing new projects, building markets, or advancing climate benefits at a systems level.
- 2. Business model innovation:** Providing financing to support the development of one project is good. Providing financing that supports the development of new business and financing models for accelerated project deployment is better. Projects that use these models to increase impact will score higher.
- 3. Alignment with low-carbon trajectories:** The choices we make today will stay with us for decades. It is important that we avoid supporting “light green” interventions today that may lock-in emissions and prevent the implementation of more effective “dark green” solutions in the future.
- 4. Emissions reductions:** The carbon impact of our projects varies depending on technology and geography. Projects that result in deeper emissions cuts will receive a higher score in our evaluation process.
- 5. Scalability:** Given the need to scale up climate solutions quickly, CoPower prioritizes project technologies that are ready to be deployed widely and where our financing can make a difference. The question we ask: is there a path to financing the next \$100M?
- 6. Broader sustainability:** Beyond positive climate benefits, we also consider other potential environmental impacts, both positive and negative, for example, a project’s impact on a local ecosystem. We are also in the process of developing criteria to assess projects’ climate resiliency.
- 7. Social and community impact:** Projects may also have an impact on a local community, for example, by creating new jobs. CoPower is also a big supporter of community-owned energy projects where local members come together to fund, develop and share in the benefits of a project.\*

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\* Refining these criteria is an iterative process and we welcome feedback. In particular, we will be working this year on expanding our ability to assess broader sustainability and social and community impact.

IMPACT EVALUATION MATRIX	1	2	3	4
<b>Additionality</b>	Refinancing an existing project with no potential for new projects	Refinancing to potentially deploy more projects	Refinancing to fund business and deploy more projects	Financing required to get this project built OR refinancing directly funds new projects
<b>Business or financial model innovation</b>	No innovation	Mainstream finance is there, but we are helping support the smaller market	Participating in energy as a service model	Helping create new energy as a service model (business model + financial model innovation)
<b>Alignment with low-carbon trajectories and avoidance of lock-in.</b>	High risk of emissions lock-in present	Risk of lock-in is present, however, a viable path toward mitigation exists	Risk of lock-in is present, however, specific plans are in place to mitigate that risk and shift to more effective solutions when feasible	No risk of emissions lock-in present
<b>Emissions reductions over the term of the loan</b>	0.25 kg/CO2e/\$	0.5 kg/CO2e/\$	1 kg/CO2e/\$	2 kg/CO2e/\$ +

IMPACT EVALUATION MATRIX	1	2	3	4
<b>Scalability</b>	This is likely a one-off project	This financing is likely to lead to other financings like it, with this sponsor or others	This financing will help us do the next \$100M like it, with this sponsor or others	There is a viable path toward financing the next \$100M with this sponsor
<b>Broader sustainability</b>	Poor environmental impact assessment; negative, supply chain; energy end-user engaged in unsustainable activities			Clean environmental impact assessment; positive supply chain; end-user engaged in activities with other sustainability benefits
<b>Social and community impact</b>	Wide-spread negative community impact and perception			Wide-spread positive community perception and involvement

# Our Investments in Practice



## Our Green Bond portfolio

The overall portfolio backing our Green Bonds contains more than 1150 individual clean energy and energy efficiency projects including LED retrofits, rooftop and ground-mount solar PV installations, and geexchange heating and cooling projects across Canada.

The emissions reduction impact of these projects vary by technology, location and the term of the loan.

## Our current portfolio breakdown

UPDATED JULY 31, 2019	\$ AMOUNT INVESTED	AVG ANNUAL CARBON IMPACT PER \$ INVESTED	LIFETIME CARBON IMPACT PER \$ INVESTED*	% OF GB PORTFOLIO INVESTMENTS
<b>Energy Efficiency (84%)</b>				
<b>LED Retrofits</b>	\$12,537,113	0.383 kg / CO <sub>2</sub> / \$	1.42 kg CO <sub>2</sub> / \$	52%
<b>Geoexchange</b>	\$7,849,786	0.333 kg CO <sub>2</sub> / \$	3.22 kg CO <sub>2</sub> / \$	32%
<b>Clean energy generation (16%)</b>				
<b>Solar</b>	\$3,856,528	0.013 kg CO <sub>2</sub> / \$	0.046 kg CO <sub>2</sub> / \$	16%

\* Lifetime carbon impact per \$ invested is based on the term of the loan and is therefore the portion of impact directly attributable to CoPower and our investors; the actual operational life-span of these technologies may be longer. This is particularly true in the case of geexchange and solar projects.



## Is refinancing impactful?

Many of the project loans backing our Green Bonds are refinancing for operational clean energy projects. According to the Climate Bonds Initiative, the primary value provided by the bond market is refinancing, in that refinancing allows capital to be recycled to new projects.

In other words, the easier it is for investors and lenders to recycle their equity, the more they will invest a new projects. A large and liquid green bond market is a necessary precondition for building low carbon infrastructure at scale.

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## Challenges and limitations

In the interest of transparency and contributing to broader industry conversations, it's important to acknowledge the limitations and challenges inherent in our current model.

As a young company, setting our impact goals and a strategy to reach them also involves a realistic assessment of our place in Canada's impact investing landscape. The sustainability of our model involves balancing competing objectives, namely the acceptable levels of risk, return, and the impact we and our investors desire.

It is true that more aggressive, innovative climate solutions, waste to energy for example, also require financing and over time we aim to develop full suite of lending options to meet the complex needs of project developers. While we work to move in this direction, we must balance that goal with the fact that at present, many of these projects, technologies and financing structures are incompatible with the level of risk appropriate for a broadly accessible retail investment product like CoPower Green Bonds. When it comes to Green Bonds our mantra is that boring is better.

# Our impact metrics



CoPower is a registered IRIS user. IRIS is the catalogue of generally accepted performance metrics used by a majority of impact investors world wide and maintained by the the Global Impact Investing Network (GIIN).\*

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**CoPower requires all investees to submit impact projections during due diligence. Once the investment is made, investees are required to report actual quarterly impact data.**

\* Note: IRIS has become IRIS+. The following metrics are consistent with the updated IRIS+ catalogue and CoPower is in the process of transitioning its original IRIS profile to the new IRIS+ registry to be launched later in 2019.



## CoPower Green Bond Positive Climate Impact

IMPACT METRIC	IRIS CODE	MEASURE	CUMULATIVE IMPACT UP TO JULY 31, 2019
<b>Greenhouse Gas Emissions Avoided</b>			
<b>GHGs avoided from clean energy generated</b>	PI7015	Metric Tonnes of CO2 Equivalent	67 tonnes
<b>GHGs avoided from energy saved</b>	PD2243	Metric Tonnes of CO2 Equivalent	12,026 tonnes
<b>Total GHGs avoided</b>	--	Metric Tonnes of CO2 Equivalent	12,093 tonnes
<b>Energy Efficiency</b>			
<b>Energy saved</b>	PD4927	kWh of electricity or	102,220,847 kWh
<b>Projects enabled</b>	--	Individual energy efficiency projects financed	1,165
<b>Clean energy generated</b>			
<b>Electricity generated</b>	PI5842	kWh of electricity	1,684,567 kWh
<b>Projects enabled</b>	--	Individual clean energy projects financed	6



## **Energy Savings from Services Sold (IRIS ID: PD4927)**

*IRIS Definition: The amount of energy savings due to the organization's services that were sold during the reporting period.*

This energy savings metric applies to our LED retrofit portfolios as well as our residential geexchange projects. In both cases we go beyond the average per client prescribed by IRIS, and instead require our project partners to submit projections of how much electricity (kWh) will be saved as a result of each individual retrofit.

We also convert the kWhs saved to a \$-value to estimate the energy savings to the building manager(s) over the lifetime of the upgraded equipment or new installations.

## **Renewable Energy Generated For Sale (IRIS ID: PI5842)**

*IRIS Definition: Amount of renewable energy generated and sold to offtaker(s) during the reporting period.*

Currently, CoPower's energy generation portfolio consists solely of solar PV projects. We use clean energy generation projections over 5 years as determined by models like PVSyst, the industry standard. We then check this against actual monthly solar production numbers for our projects as reported by on-site monitoring systems and the utility companies. This value fluctuates month to month (usually highest in the summer when there is more daylight).



## **Greenhouse Gas Emissions of Energy Generated for Sale (IRIS ID: PI7015) AND Greenhouse Gas Emissions of Product Replaced (IRIS ID: PD2243)**

*IRIS Definition: Amount of greenhouse gases (GHG) emitted through production of energy by the organization and delivered to offtaker(s) during the reporting period.*

*IRIS Definition: Amount of greenhouse gases (GHG) that would have been emitted by the replaced product during the lifetime of the organization's product.*

In order to convert the data above (eg. kWh saved as a result of replacing incandescent bulbs with LEDs, or kWh of clean energy generated for sale) to carbon emissions avoided we use electricity and/or natural gas conversion factors from Environment Canada's National Greenhouse Gas Inventory Report. These factors vary by province as the power production and resulting greenhouse gas emissions intensity varies across Canada.

The latest available emissions factors are from 2015. At the publication of the next National GHG inventory report you may note a shift as we update both our previously reported impact and future impact projections.