The Lab

India Innovation Lab for Green Finance

FINANCING FOR LOW-CARBON AUTO-RICKSHAWS

TYPE: MITIGATION

SECTOR: TRANSPORTATION

GEOGRAPHY: INDIA

LAB CYCLE: 2018

PROPONENT: THREE WHEELS UNITED

India has 9 of the 10 most polluted cities in the world. Auto-rickshaw fleets in Indian cities on average are responsible for around 10% of this pollution. Also, most auto-rickshaw drivers opt to rent their vehicles instead of own them, due to the high cost of financing and a lack of fitting financing options for ownership. This instrument aims to provide loans to drivers to enable ownership of electric auto-rickshaws, which will both reduce carbon emissions in Indian cities and enhance the livelihoods of drivers.

> Financing for Low-Carbon Auto-Rickshaws is a loan product that will enable drivers to purchase electric auto-rickshaws by providing debt financing for 100% of the purchase, lower interest rates, and no collateral requirements.

INNOVATION

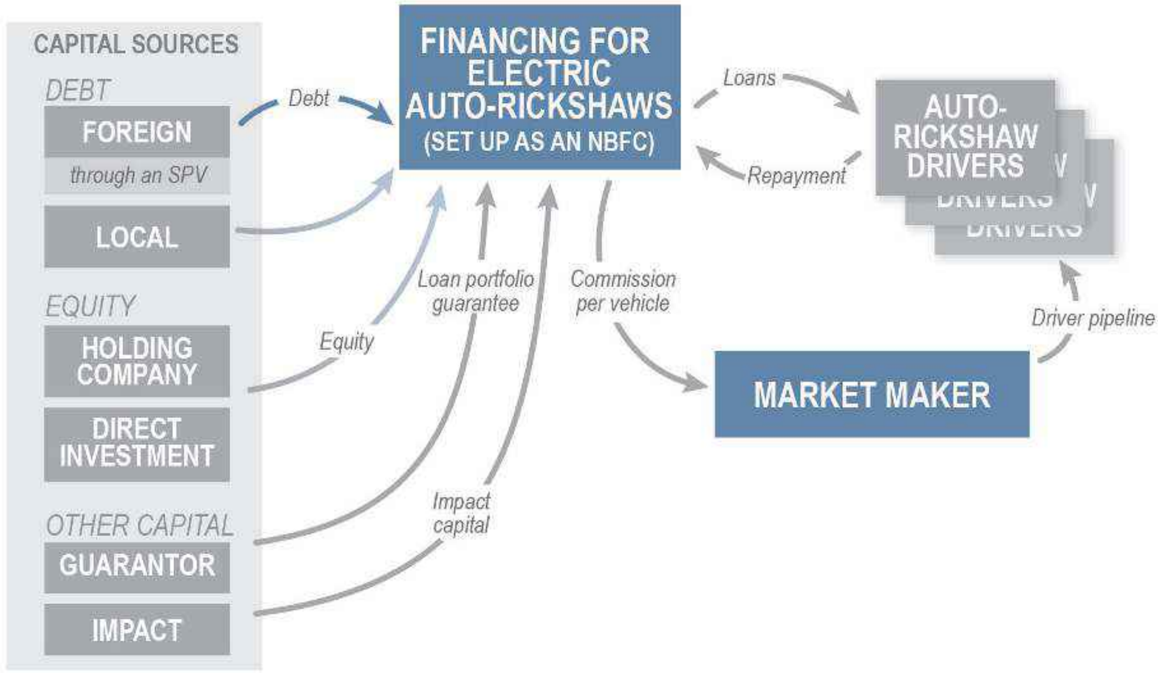
Financing for Low-Carbon Auto-Rickshaws is a loan product that has several distinctive features to provide a feasible pathway for drivers to purchase an electric auto-rickshaw. Most financing options in India require collateral for a loan, only partially finance the vehicle, and/or have predatory interest rates. This instrument has no collateral requirements, and offers debt financing for 100% of the auto-rickshaw cost and lower interest rates.

Another important innovation is that this instrument uses a community-driven loan collection system that incentivizes timely loan repayments and reduces the risks of loan default.

> This instrument will incentivize drivers to switch from conventional auto-rickshaws to electric auto-rickshaws, and will also enable driver savings of 20-30%.

IMPACT

- By offering drivers a feasible path to vehicle ownership, this instrument results in increased daily savings of 6% during the loan tenor, and 31% after the loan tenor, when compared with drivers renting their vehicles.
- For the pilot, the proponent plans to extend loans for 500 electric auto-rickshaws. This would mobilize US$1.1 million in investment and avoid 18,500 tons of carbon emissions over 10 years.
- As the instrument scales up over the next three years, the proponent plans to extend loans to an additional 9,000 auto-rickshaw drivers, mobilizing US$ 33 million of investment and avoiding 330,000 tons of carbon emissions over 10 years.



DESIGN

The instrument will be set up as a non-banking financial company (NBFC). The NBFC will pool in different types of capital – equity, debt, and concessional finance – to lower the cost of loans extended to the auto-rickshaw drivers.

- **Equity:** The equity capital providers would invest at the company level (NBFC) or at the holding company level.
- **Debt:** Debt capital can be sourced both from domestic and foreign lenders. Domestic capital providers would lend capital directly to the NBFC, while foreign debt capital providers would lend through an alternative investment vehicle (SPV).
- **Concessional capital:** Concessional capital – in the form of a partial credit guarantee and/or impact capital – would enable the NBFC to raise additional commercial debt and increase its credit rating of the NBFC, reducing the cost of borrowing.

To create a pipeline of loans, a non-profit arm of the proponent (market maker in the graphic) will run campaigns and programs to identify potential drivers/ borrowers. The NBFC will be responsible for assessing applications, disbursing the loans to successful applicants, and managing collections of loan repayments through a community-based system that incentivizes timely payments.

TEAM

KEVIN WERVENBOS
CIO, THREE WHEELS UNITED

CEDRICK TANDONG
CEO, THREE WHEELS UNITED

INVESTMENT OPPORTUNITIES

TYPE	ROLE OF CAPITAL	AMT.
PRIVATE EQUITY	To begin operations and build a track record	USD 1.1M in the pilot phase USD 6.6M in the scale-up phase
DEBT	To reduce the cost of borrowing, consequently the cost of lending	USD 26.4 million in the scale-up phase
IMPACT CAPITAL	In the form of credit guarantee during the initial stages to raise debt capital quickly and reduce the cost of debt	N/A

The India Innovation Lab for Green Finance is a public-private initiative in India that brings together experts from government, financial institutions, renewable energy, and infrastructure development to identify, develop, and accelerate innovative investment vehicles for green growth in India. Analytical and secretariat work of the India Lab has been funded by Shakti Sustainable Energy Foundation, the David and Lucile Packard Foundation, the Oak Foundation, and the UK Government. Climate Policy Initiative's team in Delhi serves as Lab Secretariat and analytical provider.