BRAZIL ENERGY PROGRAMME

Market Engagement Event

3 Sept 2020

Adam Smith International

CLT CARBON LIMITING TECHNOLOGIES

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AGENDA

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TIME	AGENDA ITEM	PERSON
15:00	**Overview of the agenda**	Rukhsana Faiz, BEP
15:01	**Introduction to Prosperity Fund and Brazil Energy Programme**	Bikash Dawahoo, FCDO
15:05	**Purpose of pilots**	Gilberto Jannuzzi, BEP
15:10	**Structure of competitions**	Jose Lavaquial, BEP
15:15	**Pilar competition**	Jose Lavaquial, BEP Carolina Freitas, Light Utility
15:25	**The PQQ stage – what you need to know**	James Ruel, BEP
15:30	**After the PQQ**	James Ruel, BEP
15:35	**Questions**	All as appropriate
16:00	**Webinar closing**	Rukhsana Faiz, BEP

Introduction to PF and BEP

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Prosperity Fund

- British Government's £1.2 billion global fund
- Partnerships, inclusive economic growth, mutual prosperity and progress towards UN SDGs
- In Brazil, focus on Energy, Green Finance, trade and future cities

Brazil Energy Programme

- Accelerates adoption of clean energy to support disadvantaged groups
- Provides UK funding and international expertise
- Recognises Brazil's enormous potential in renewables
- Includes regulatory and policy support, and technology demonstrations
- Demonstration pilots are the focus of this webinar

Purpose of pilots

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- Reduce cost of energy (or provide access to energy) for less-privileged consumers
- Provide income generation opportunities for the poor or disadvantaged groups
- Overcome ‘challenges’ faced by Brazilian challenge partners in biogas, biofuels and solar / storage / smart grids
- Stimulate involvement in the Brazilian energy market from UK and international organisations

How pilots will address challenges

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- Run competitions to address identified challenges
- Deploy new and innovative technologies through approx. 9 demonstration pilot
- Demonstrate viability of locally deployed technologies and solutions in order to scale up across the country

Structure of the competitions

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Pilot and challenge competitions to demonstrate innovative low carbon technologies in the solar, storage, smart grids, biofuels and biogas sectors

Challenge Competition 1 – Solar Energy, Energy Storage and Smart Grids - £3m funding
Challenge Statement:
How can a more advanced, clean, decentralised energy generation model deliver greater energy access and affordability for poorer communities in Brazil?

Pilot 1 – Pilar Solar
Challenge Statement:
How can electricity be more affordable for consumers in areas where there is poverty, but consumers do not quality for the Social Tariff?

Pilot 2
Full details available at the next application stage

Pilot 3
Full details available at the next application stage

Sub-challenge 1
How can solar and storage be integrated into the grid and reduce electricity costs for less privileged consumers?

Sub-challenge 2
How can domestic smart systems help consumers save money?

Sub-challenge 3
How can Time of Use electricity pricing encourage deployment of new technologies like energy storage?

Sub-challenges available at the next application stage

The Pre-Qualification Questionnaire covers Challenge Competion 1, with the exception of sub-challenge 3 for the Pilar Solar Pilot

Biofuels and Biogas Demonstration Pilots

Details of competitions 2 and 3 (pilots 4-9 to be released later in 2020

Pilar competition

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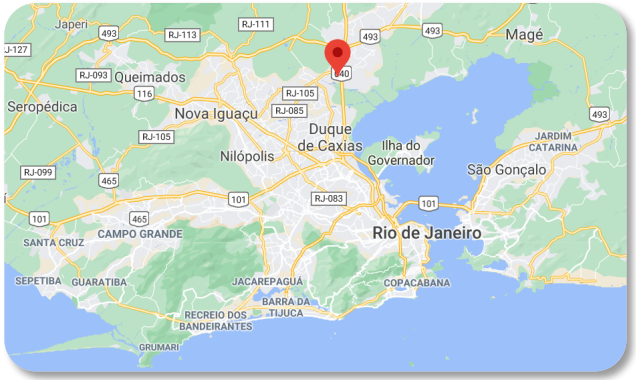
Pilar

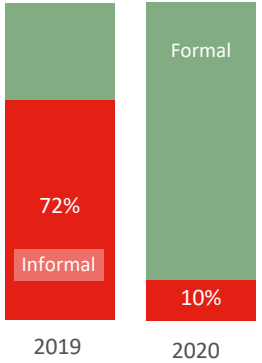
- A community in Rio metropolitan area
- 71% under Brazil's minimum wage ~£$140
- Average Per Capita income: ~£$80

Light in Pilar

- Electric infrastructure, community engagement
- 1100 new clients
- "Informal" customers: 72% to 10%



Energy Consumers in Pilar



Pilar competition: Carolina Freitas, Light

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“Light is a utility company that was founded in 1905 when Rio had only 600,000 inhabitants and six cars. In these last 115 years, Light has become a vertically integrated company, generating, transmitting and distributing electricity to 10 million people and some of the most significant heritage sites in Brazil. During this period, while the population of London grew by only 37%, Rio grew by 1,600%!

Pilar is a community in the Rio metro area, home to less-privileged families where Light has invested in electrical infrastructure and social engagement to provide energy and to formalise consumers who were not paying for electricity. We’ve reduce these losses from 92% to 10%.

Together with the UK Prosperity Fund, we want to transform Pilar into an open-air laboratory where we intend to validate they hypothesis that it is possible to use state-of-the-art technologies to provide high-quality, lower-priced energy to families in vulnerable situations.

The success in Pilar will allow us to replicate the model for a huge number of less-privileged families served by Light and other companies in Brazil.”

Pilar competition

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Pilar competition

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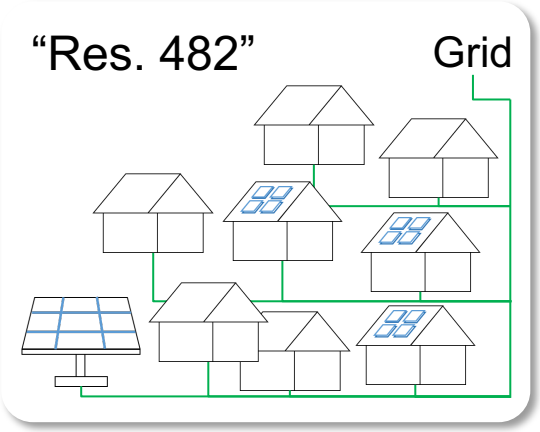
Pilot 1: Pilar Solar pilot

- "Open air laboratory"
- Energy to low income families in a community in the Rio de Janeiro metropolitan area
- State-of-the-art equipment

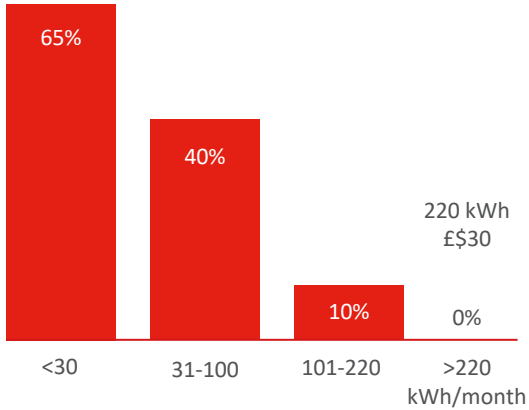
- Photovoltaic panels
- Batteries
- Smart monitoring systems



Consortium to generate and use on-grid electricity

Social Tariff

Discount on energy bill



Govt. subsidy for the electricity bill: low-income, elderly or disabled

The PQQ stage – what you need to know

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- **New deadline** – **25th September midday** (UK time) to pilotapplication@ukbrep.org
- PQQ stage covers all three of the Solar Energy, Energy Storage and Smart Grids pilots
- To be eligible for Pilot 2 and 3, you must apply through this PQQ
- Submit questions to pilotinfo@ukbrep.org, Q&A document updated as necessary
- Forms from https://www.ukbrep.org/innovative-technologies#upcoming-pilots
- Supporting evidence – within reason
- Applying alone or as a part of a ready made consortium – either is acceptable but
  - If you apply in your own right you can join or leave any consortium
  - If you do not apply in your own right but only as part of an established consortium you can leave that consortium but cannot join another one
- That is because your technology will have been reviewed only within the context of the consortium.

Tips on applying

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- Respect the word limits and keep it clear
- Have you completed everything you need to complete?
- Beware assuming prior knowledge
- Limit supporting evidence – keep this and content relevant
- Read the guidance and the questions
- Answer the questions
- Make this easy for the assessors
- Be realistic about what your technology can and cannot provide
- Think about the differences in Brazil (e.g. energy systems, language, etc.) and the Programme priorities

After the PQQ

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- We will acknowledge receipt
- We will check eligibility as described in the guidance
- Assessors will score the PQQ response
- A sample of scores will be Quality Assured

- You will be notified of the outcome; either:
  - Successful and invited to the consortia building stage for the first pilot
  - Successful and will be invited to the consortia building stage for the second pilot
  - Unsuccessful

- The consortia building stage for the Pilar Solar pilot will launch after you have been notified and provides a facilitated approach to help you build consortia. There will be an initial webinar to explain and kick off the process
- Feedback will be provided to those taking part in the pilot consortia building stages

Questions and next steps

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Questions

- Please type any questions into the chat function

Next steps

- Submission deadline is midday 25 September 2020
- Download PQQ documents from ukbrep.org/innovative-technologies#upcoming-pilots
- Questions to pilotinfo@ukbrep.org
- Email completed PQQ to pilotapplication@ukbrep.org


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