Insight from
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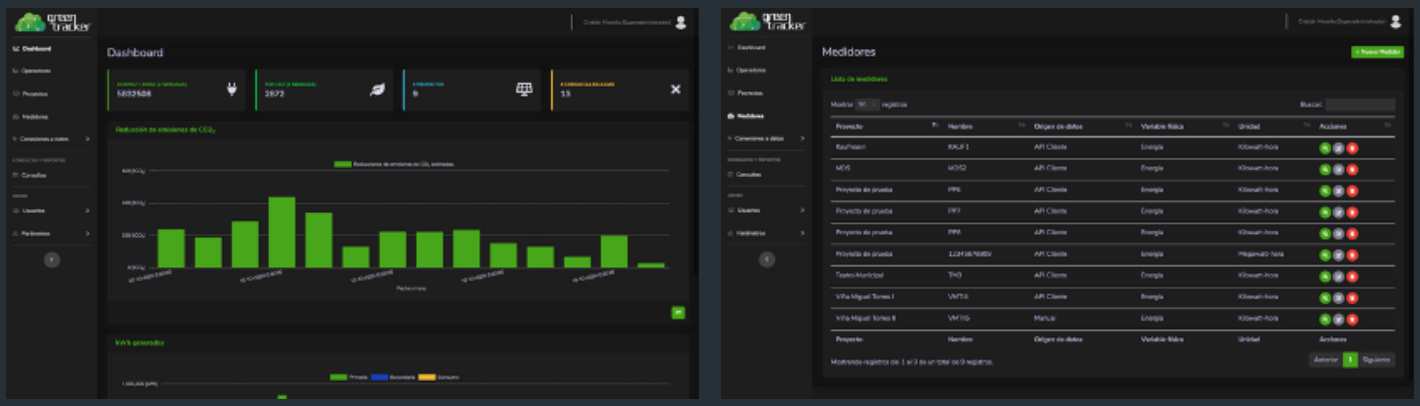
Cristián Mosella is an Engineer from Chile and co-founder and managing director of EnergyLab, a Latin-American start-up based in Chile. EnergyLab is currently piloting Green Tracker – a cloud-based hybrid blockchain system, where green actions such as green power, electromobility and materials recycling are set with their corresponding MRV, so the primary and secondary data are collected through a background service connected to the corresponding monitoring sources – IoTs preferably and AI-assisted image recognition systems. The application is expected to become fully productive by mid-2021.

Q: What is the role of Open Data in your current work with the establishment of a blockchain-based MRV System? Do you use and generate open data?

A: That is a very interesting topic, where some tensions are reflected. On the one hand you want as much transparency as possible, in order to show traceability and build confidence and trust in the systems, while on the other hand you get the natural reluctance of companies in opening their data sets. Everybody knows that huge business opportunities will be around managing large volumes of data, but since this trend is still new and is evolving very fast, it gets difficult to assess what the trade-offs will be in the short term. Whether Open Data is the best way to add or create value from a specific data set seems hard to tell.

In our Green Tracker project, which is a blockchain-based MRV system, the issue tends to become highly relevant. We are working with great granularity, which in most of the cases goes beyond of what is publicly available. In this case it is left to the companies to create different profiles on the system, where they can administer the level of openness for different types of users.



Screenshot of digital MRV system Green Tracker: CO_2 Reductions achieved and List of Mitigation Measures. Source: Green Tracker.

Did you experience challenges of interoperability during the set-up of Green Tracker? What are your key findings?

Any application that aims to be widely used needs to think deeply about interoperability. Otherwise, this will certainly become a relevant barrier when scaling-up the application. Green Tracker deals with raw data coming from different type of meters, IoTs and data lakes, where everything may follow different conventions, structures, and protocols. It seems important that once the common ground has been identified, we set up the required codes and intermediary infrastructure which lets the system homogenize the wide diversity of system and connections that the application will be dealing with. So, data collection and the adequation and homogenization are very relevant. But apart from that, especially for projects like the Green Tracker, it is very relevant to deal with several types of monitoring devices. The same occurs with DLTs, where interoperability may potentiate the power, scope and scaling capacity of the climate impact.

How do you address challenges around interoperability? Do you know of best practice approaches?

We see that flexibility from the developer's perspective and standardization from the data generator's perspective are required for the most relevant systems' features and sources of data. These are the attributes that should be kept in mind from the early stages of the development of any solution.

Is interoperability also relevant to your work on the blockchain level? For example, do you plan to work with two or more DLT systems in the future?

It is certainly relevant. The DLT solutions we are working with make sense only when they deal with good quality data, which in our cases are directly obtained from the physical world. So, having an "oracle" that allows us to bring data from a wide range of devices, physical variables and types of technologies is a great challenge. At the same time, it increases our chances for adoption and scaling up. Another challenge that may soon become relevant will be the integration of different types of payment services and potential token-exchange functionalities from different blockchain ecosystems.