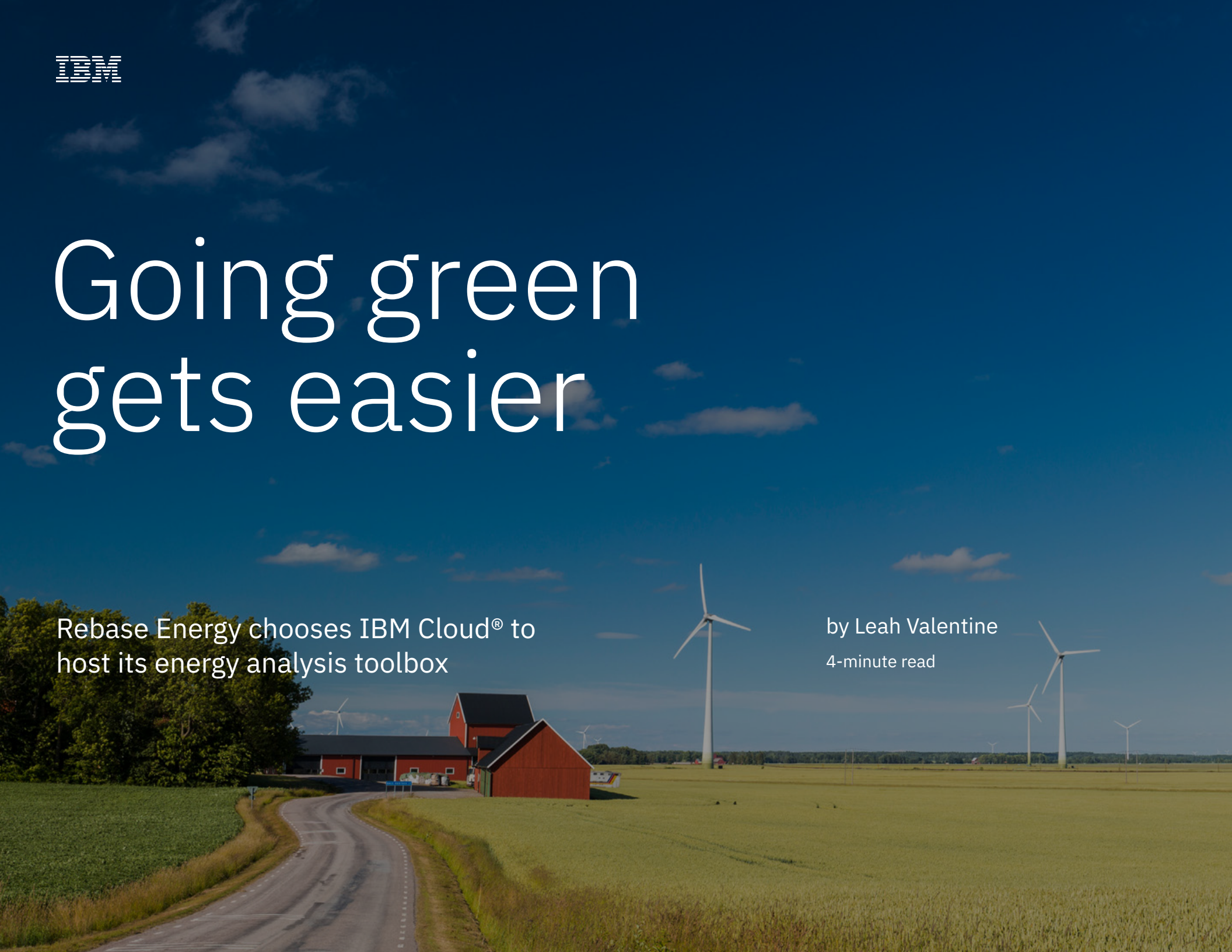




Going green gets easier

Rebase Energy chooses IBM Cloud® to host its energy analysis toolbox

by Leah Valentine
4-minute read



All over the world, companies are embracing renewable energy as a way to help curtail climate change and create a more sustainable future.

As a country, Sweden is deeply committed to this movement, having pledged to switch to 100% renewable energy sources by 2040. As a result, many organizations in Sweden are already adopting wind or solar energy. But there's more to it than simply purchasing a wind turbine or putting up some solar panels.

That's where Stockholm-based startup Rebase Energy comes in. Rebase's software-as-a-service (SaaS) offering helps organizations of all sizes optimize



and share renewable energy. Sebastian Haglund El Gaidi, CEO and Cofounder of Rebase Energy, explains: "Our vision is to provide the best data and tools that empower tomorrow's energy innovators

to forecast and optimize distributed energy assets and thereby contribute to the transition to a fully renewable and robust energy system."

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Sebastian Haglund El Gaidi,
CEO and Cofounder, Rebase Energy

Sweden’s
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100%

renewable energy by 2040

As of 2018

>54%

of Sweden’s energy comes from
renewable sources

Source: Swedish Energy Agency

An optimization toolkit

In the three years since it was established, Rebase Energy has found an important ally in Startup with [IBM® Accelerator Sweden](#), a mentorship program aimed at helping startups succeed. Explains Haglund El Gaidi, “With the IBM Accelerator team, we get a lot of input, not only on the technology, but also on the business side of things — looking at our business model and understanding how to change it to be more relevant and competitive in the market.”

In fact, Rebase’s current business model differs significantly from the original. Haglund El Gaidi explains: “We shifted from only providing predictions to providing raw energy usage data and open systems that enable and empower our customers, instead of



trying to provide just one solution to fit all customers and needs.”

The pivot has paid off so far, but offering more of a do-it-yourself, SaaS approach came with a fresh set of challenges. Rebase needed to reassure its customers that the platform on which they would be working was stable and built for security. That’s why Rebase selected the [IBM public cloud](#).

“IBM is a very trusted brand in the energy space, and having that kind of trust when we take our technology to market is invaluable,” says Haglund El Gaidi.

IBM’s approach to development is also well aligned with Rebase’s business model. “Our core differentiator is that we build on an open system, very much in the spirit of IBM and RedHat,” says

Haglund El Gaidi. “Our customers all want to have a transparent view, where they can understand the data and the kind of processes that led to a particular prediction or decision.”

Rebase is also taking advantage of Kubernetes in its infrastructure. A microservices architecture is well suited to Rebase’s business because it enables flexible development and rapid deployment. However, the company’s focus is on delivering customer value in the form of analytics tools, not on managing the intricacies of microservice orchestration. Fortunately, the [IBM Cloud Kubernetes Service](#) is helping fill that gap. Says Haglund El Gaidi, “Having the IBM Cloud Kubernetes Service handle the interface between Kubernetes and the hardware is very nice for us because then we don’t need to worry about it.”

Among Rebase’s customers is an organization that operates and trades a set of wind farms in Sweden. Because low- and high-pressure weather systems move around, the available wind energy in the atmosphere can change significantly. With Rebase’s analytical tools, wind farms can identify opportunities to supply power, thereby minimizing imbalance costs.

As Rebase builds and refines its analytical tools, Haglund El Gaidi and his team are taking a long look at AI as a way to expand their offerings. Specifically, [IBM ILOG® CPLEX® Optimization Studio](#) is a licensed AI program designed to help automate decision-making. “We’re using CPLEX now, and we will be using it more and more in the future,” says Haglund El Gaidi.

Greener days ahead

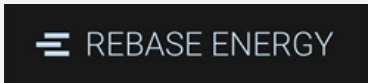
Rebase looks forward to using IBM public cloud to help Sweden – and the world – work toward a greener future. “Being a startup, it makes a lot of sense to do stuff in the cloud instead of investing in our own compute power. Right now, we’re quite small, but as we grow, we will be able to scale quickly without being limited by hardware,” explains Haglund El Gaidi.

In the meantime, the team at Rebase is laser-focused on helping bring about a more sustainable future. To that end, the company recently launched a new community aimed at helping data enthusiasts develop and test their skills in developing smart AI for energy. The community, called [Enertopian](#), will rely on open-source thinking and the sharing of data and coding.



Haglund El Gaidi concludes, “We believe that if we can engage others and crowd-source what is needed, we

can solve much more difficult problems much faster. It can help us create a healthier world.”



About Rebase Energy

Rebase, formerly Greenlytics, was founded in 2018 by a group of energy, meteorology and data enthusiasts who wanted to pool their expertise to help build a more sustainable future. Based in Stockholm, Sweden, Rebase offers customers a suite of analytical tools aimed at maximizing energy usage. Rebase employs six people.

Solution components

- Cloud databases on IBM® Cloud
- IBM Cloud® Kubernetes Service
- IBM Cloud Object Storage
- IBM ILOG® CPLEX® Optimization Studio
- IBM public cloud
- Startup with IBM Accelerator Sweden

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