



Session: Technologies for Decarbonization of Demand Sectors

Decarbonization's backbone: Harnessing the potential of data for industries and homes

Presented By Matt Reizenstein, Co-Founder, COO, Flock Energy









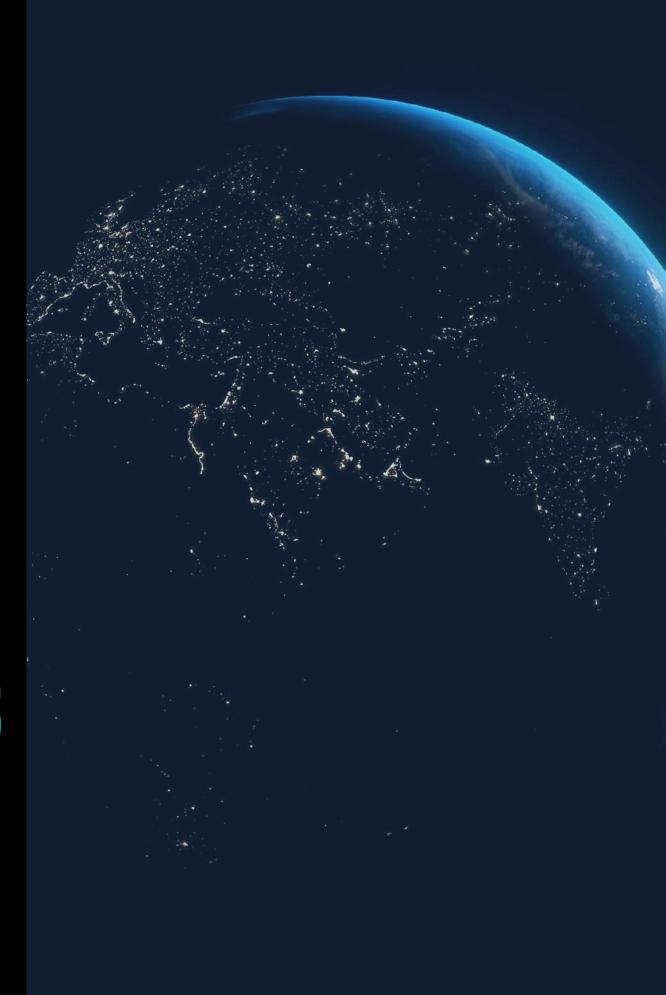






Decarbonization's backbone: Harnessing the potential of data for industries and homes

Welcome to Flock Energy



About Us

Incorporated in London in 2023, Flock Energy is an advanced energy data analytics platform, empowering energy ecosystem participants to unlock insights and optimise operations tailored to their unique needs.



We developed an industrial energy monitoring solution to deploy at a major textiles park in Gujarat



We are providing renewables forecasting for Rajasthan DISCOMs via RUVNL



Providing BTM energy disaggregation and consumption analysis, using smart meter data

Team

Ankur Sharma, CEO

- Experience in GTM strategy & building businesses
- Engineering degree and MBA
- ex-Amazon, 3x startups

Prageeth Krishnan, Head of Engineering

- Experience in IoT product development
- Electronics/Software degree and MBA PhD in applied ML from Cornell
- ex-Mitsubishi, 2x startup



- Experience in energy, including electricity policy & regulation
- Bachelor's degree from Cambridge
- ex-Shell



- Experience in IoT signal processing, ML, data science
- University



We all know the big, glamorous routes to decarbonisation



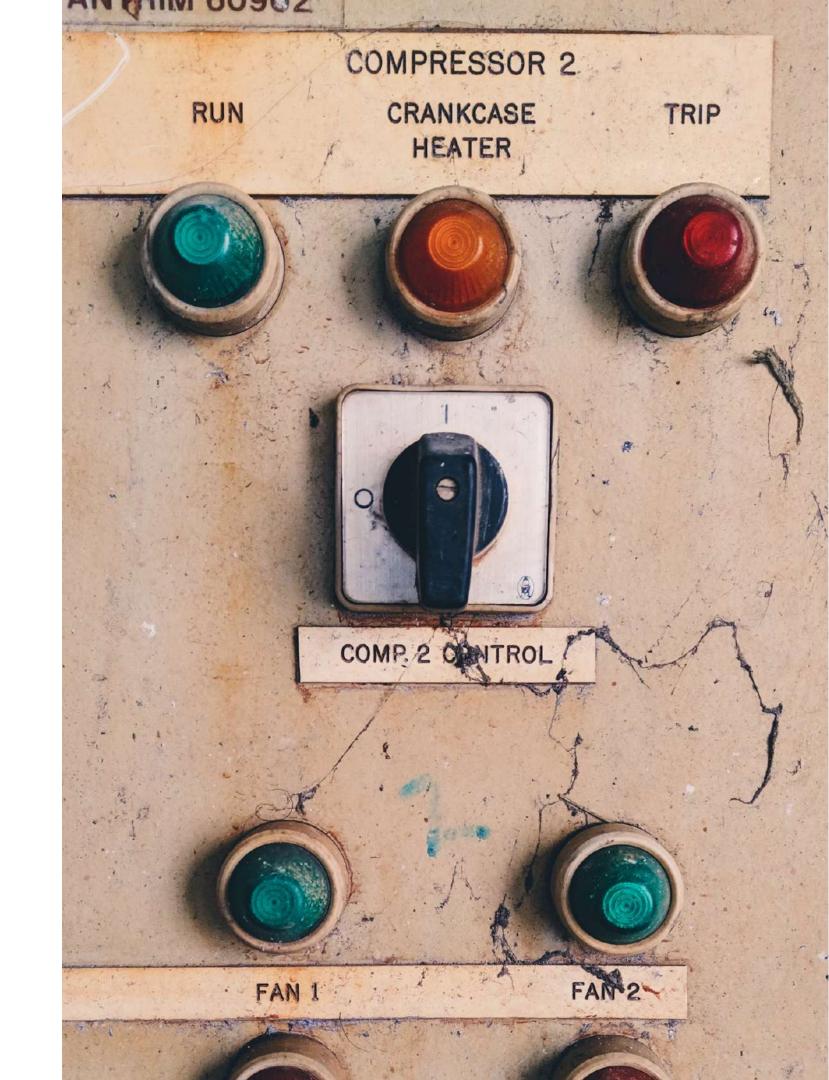


Though of course disagreements are welcome...



But far too often we avoid what some people think is boring.

It's certainly hard - but it's the "first fuel"



Industrial MSMEs - the oftenforgotten backbone







Energy can be up to 50% of costs





Under pressure from customers to reduce emissions



4

Consumer 300TWh electricity per year in India alone (equivalent to UK)

3



Lack access to capital





Available solutions target large-scale customers (expensive & complex)



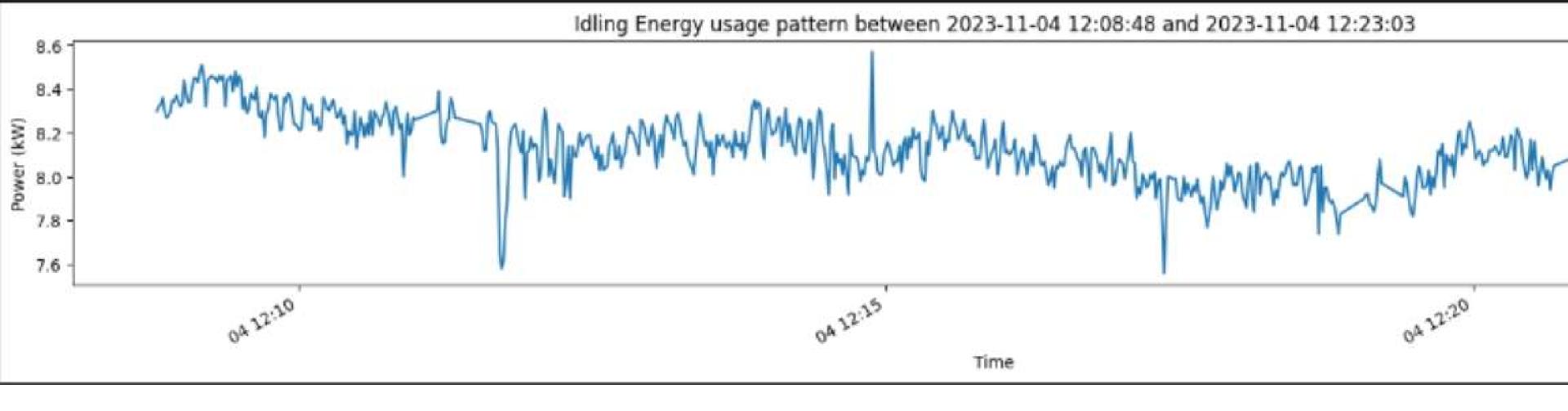


Road to net zero has to go through these businesses

From darkness to light

Setting the stage for the energy transition through data





The missed opportunity in front of our eyes. If only we knew where and how to look

Take idling for example. Our pilot customers were wasting c.16% energy

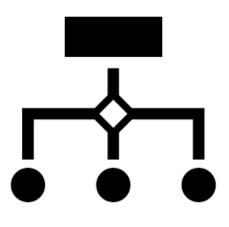


How do we find this out?

1. Measure



2. Disaggregate

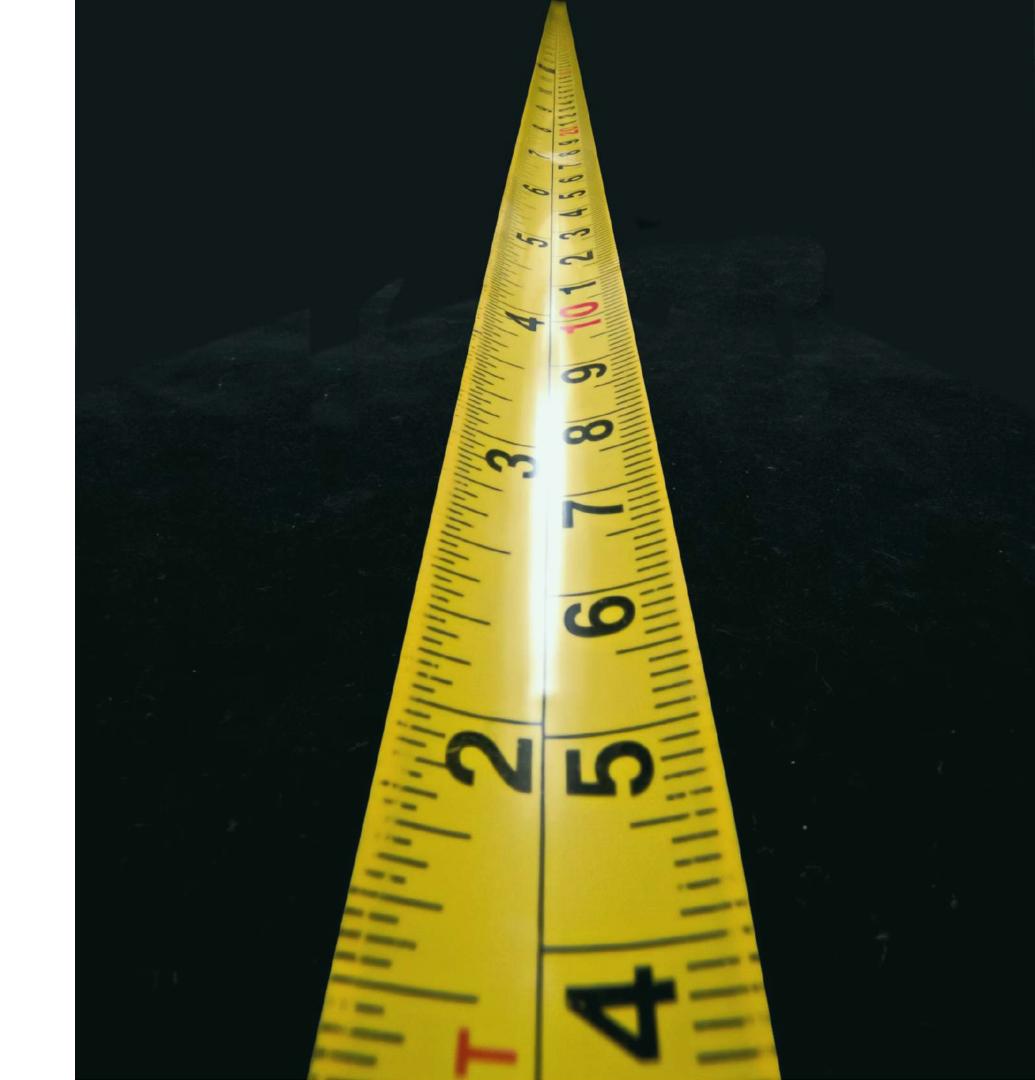


3. Analyse

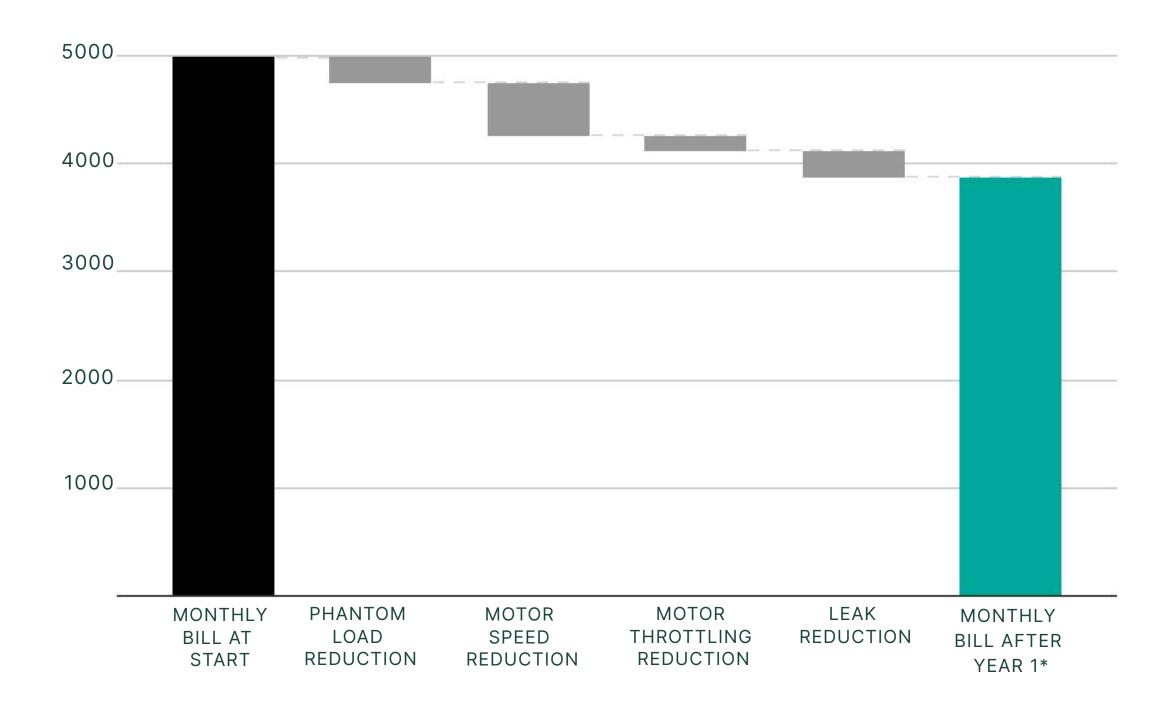


4. Notify





The Power of Data

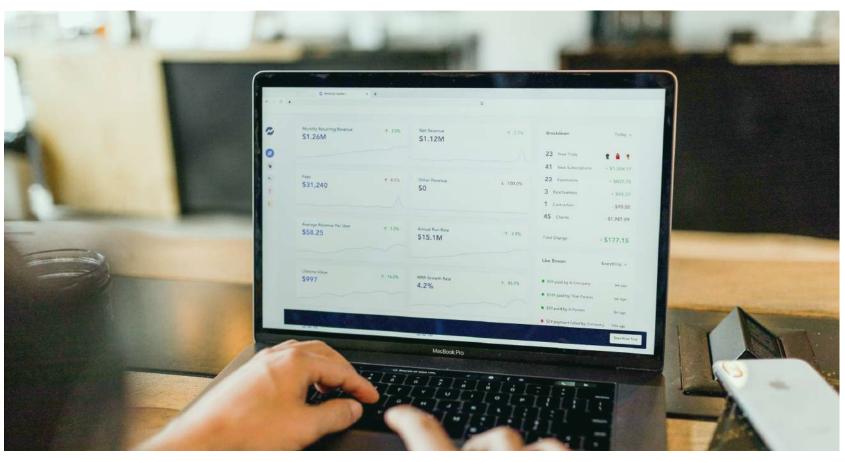


Unleashing machine-level insights to drive simple, cost-effective, sustainable solutions - making efficiency accessible to any MSME



Thinking beyond efficiency: data for flexibility





Peak shaving and valley filling

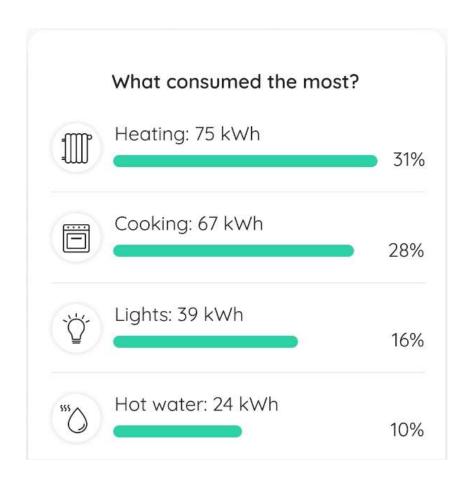
Maximising renewables; minimising fossil

BTM strategies

Moving to captive solar + batteries, H2, and beyond

We can - and must - approach domestic settings as well

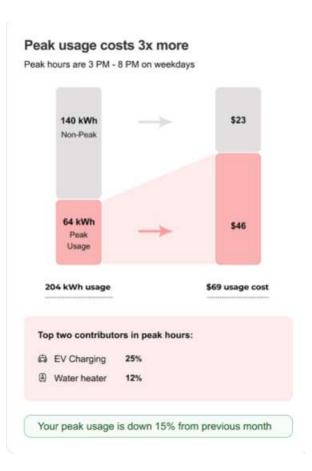
1



Appliance Disaggregation

Show customers what their energy consumption is made up of

2



Demand-side Management

Improve grid reliability by enabling consumers to shift their time of use; by detecting theft; and forecasting demand more granularly

3



Customer Segmentation

Encourage your customers to improve their efficiency, saving them money and CO2 emissions

Benefit for customers













Increased energy efficiency

Our smart meter data analytics provide valuable insights that help customers optimize their energy usage and reduce CO2 emissions and energy waste.

Energy coaching

Our platform identifies specific actions that each household can take, from changing behaviour (e.g. reducing appliance idling) to investing in new equipment (e.g. 5* ACs)

Cost Savings

By identifying energy usage patterns and providing recommendations, our platform enables customers to save significantly on their energy bills.

Benefits for DISCOMs





Increased Consumer Satisfaction

Detailed energy reports have been shown to increase customer engagement and satisfaction by up to 40% in Europe & the US.





Expand Service Provision to DISCOMs

Move from AMI to value-adding services that deepen your interactions with DISCOMs and make you impossible to replace.





Stay Ahead of the Pack

Smart meter companies in the US and Australia are partnering with analytics firms to expand their product offerings to DER management, demand response, and other grid solutions (e.g. Span with Landis & Gyr and Sense with EDMI).





Generate New Revenues

Mine your data for insights potential partners might sorely need, e.g. appliance manufacturers and who has outdated machines at home.





THANK YOU

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