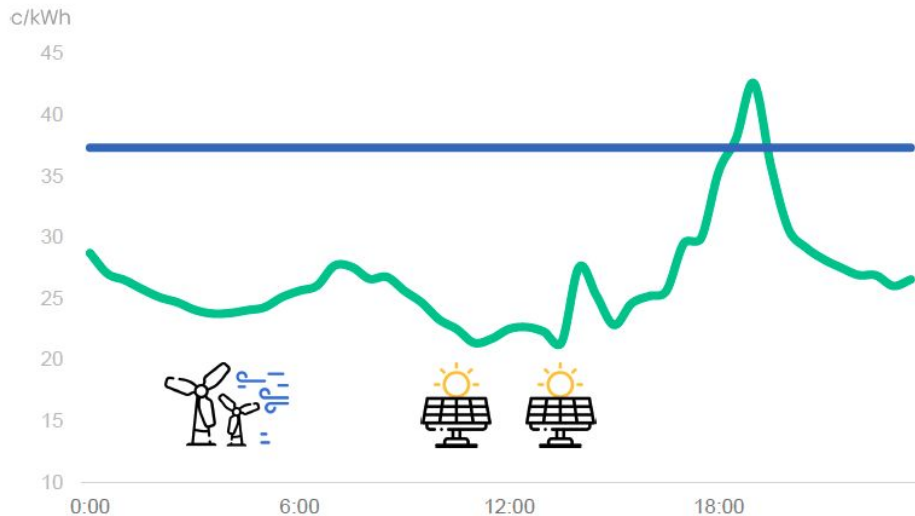


Amber is a new way to buy power designed to **unlock the value of renewable energy** for everyone, by giving everyone access to wholesale prices

Amber allows customers to **save money by automatically shifting** their usage to times when cheap renewable energy is available

This is the **fastest and cheapest way to reach 100% renewables**

Prices are cheaper when renewables are generating - but current market model does not enable customers to access these prices



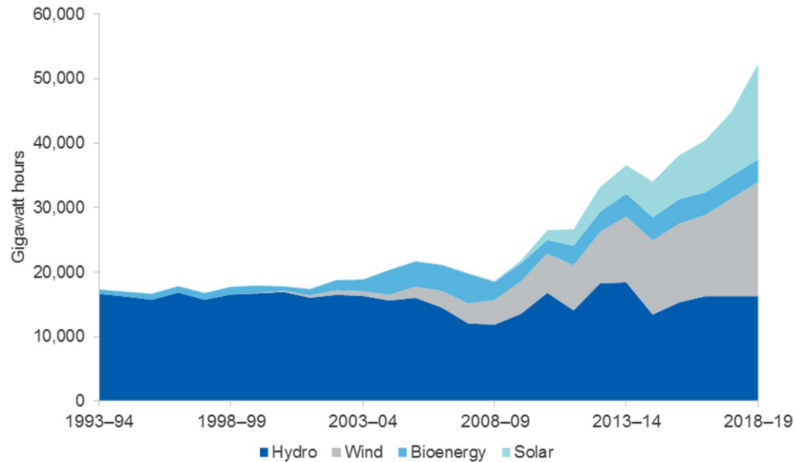
- 1 Traditional retailers **sell electricity** at a flat price
- 2 But all retailers **buy electricity** at the wholesale price, which changes every 30 mins based on supply and demand – and is increasingly driven by availability of renewables
- 3 Retailers turn changing wholesale prices into a flat price through expensive hedging strategies



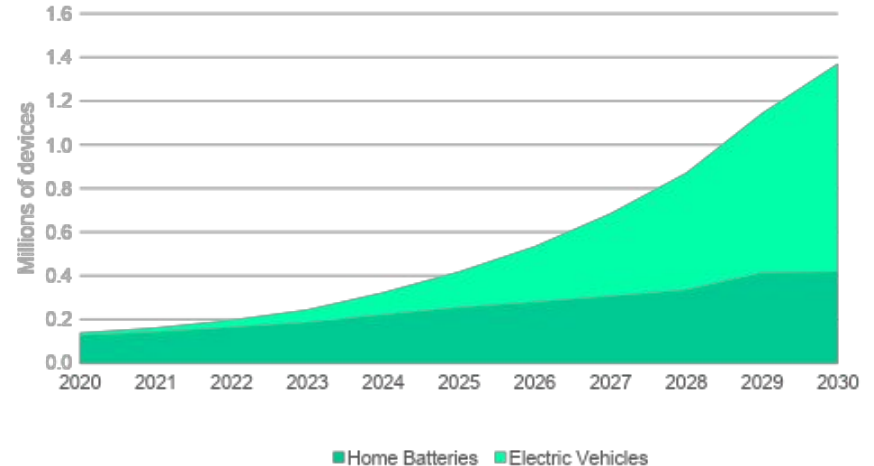
Under the current model customers, customers **can't access** the cheaper wholesale price of power when renewables are available in the grid

The electricity market is being disrupted

Abundant supply from intermittent renewables means, cheaper prices but less control over supply...

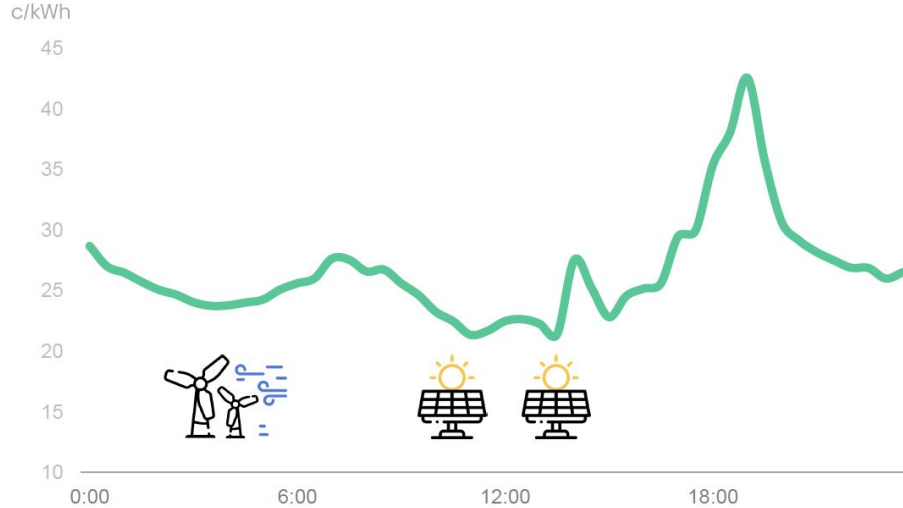


...Growing numbers of controllable devices make it increasingly possible to adjust demand to match supply



Source: <https://www.energy.gov.au/data/renewables>; AEMO 2019 Electricity Statement of Opportunities. Based on the Central Scenario. Home batteries numbers based on assumed average sized battery of 10kWh

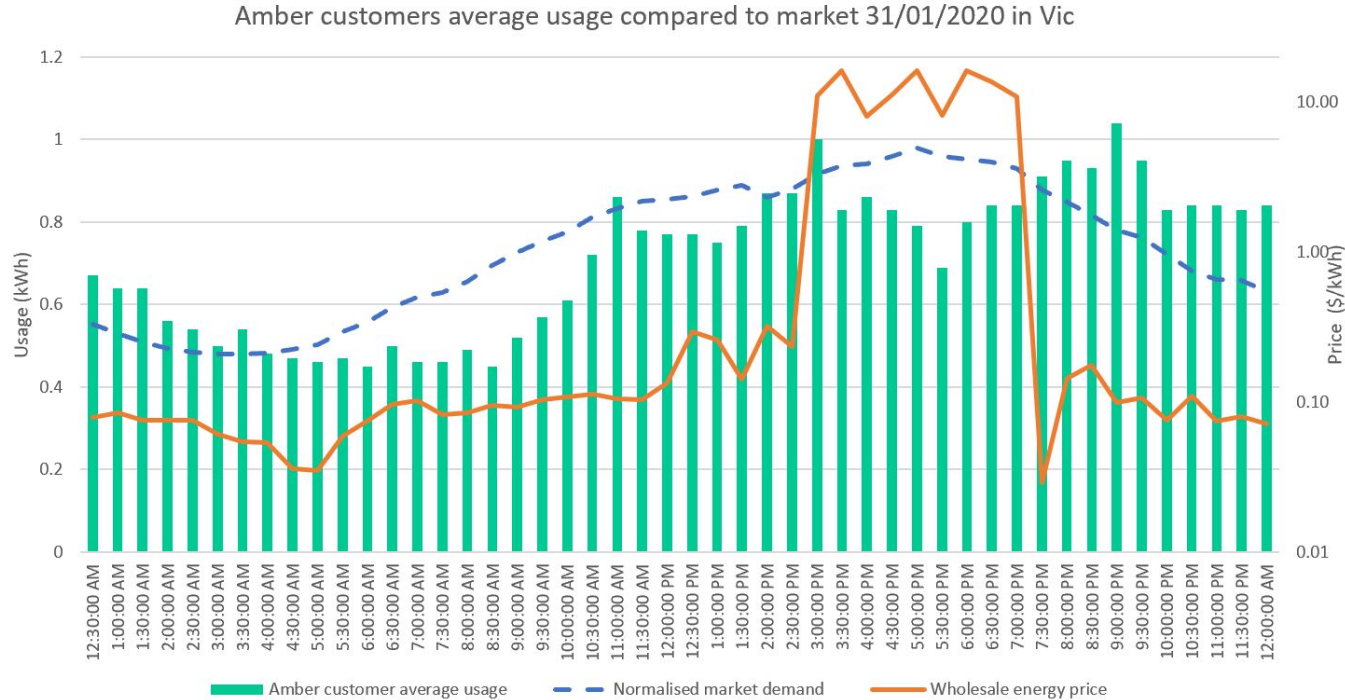
So we reinvented retail electricity - direct access to real-time wholesale prices for a fixed monthly fee



Customers save more by using power when cheaper wind and solar power are generating.



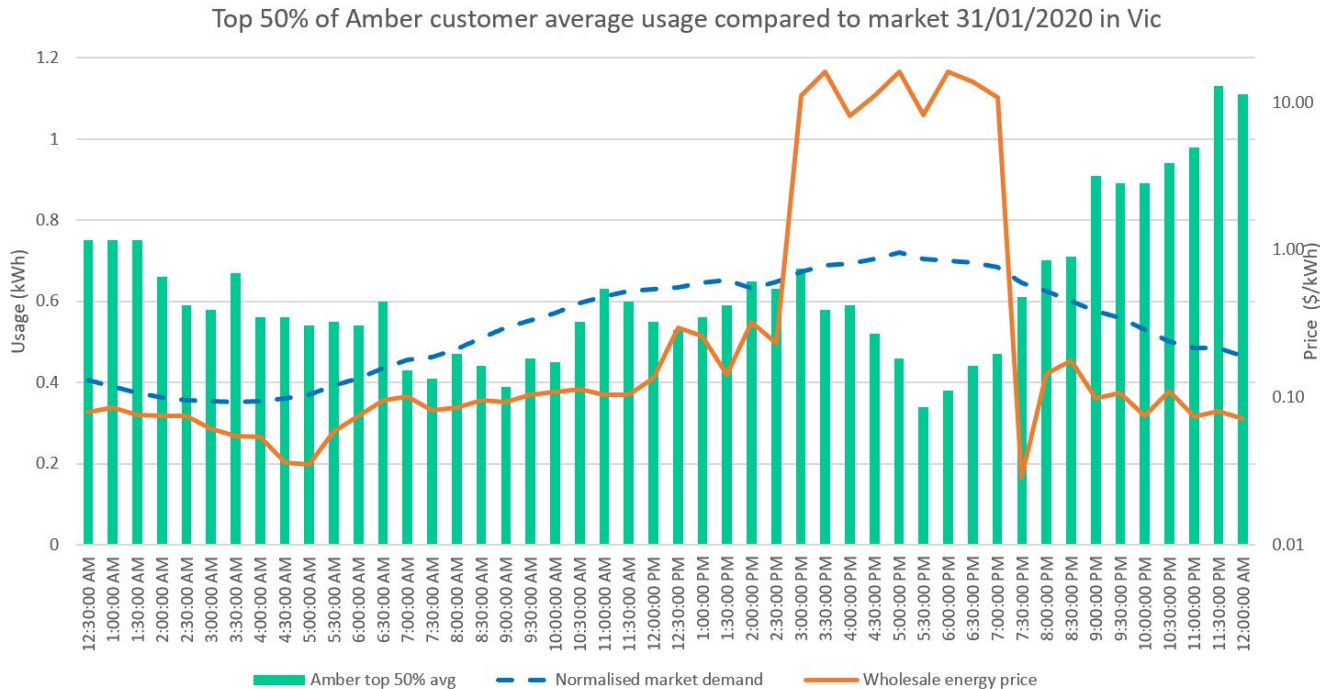
And it's working: Amber customers reduce their demand materially during price spikes



Notes

Market demand has been normalized to equal usage in the hour before the price spike.

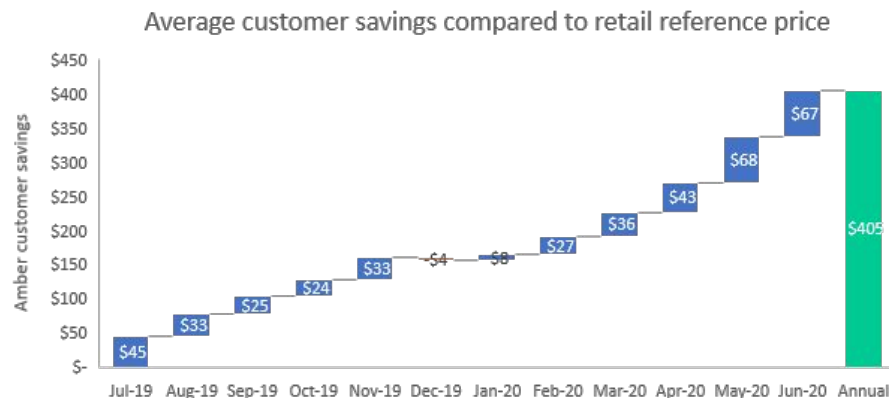
The top 50% most engaged customers reduce their demand even further



Notes

Market demand has been normalized to equal usage in the hour before the price spike.

Amber customers savings in SA for FY20



Notes

Prices include GST

Based on actual Amber customer load profiles for FY20 for customers who were with Amber for the full 12 months in the SAPN region.

Based on general usage data assuming all customers are on anytime network tariffs and are on Amber's carbon neutral tariff.

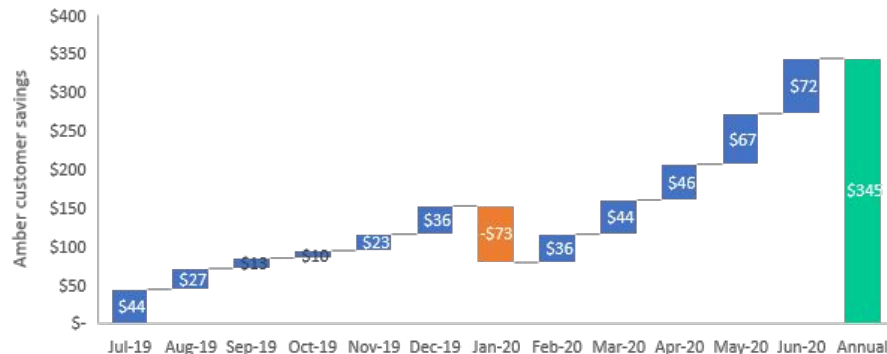
DMO = Default Market Offer. DMO price calculated based on Amber's daily supply charge for a customer with 4000 kWh annual usage.

Amber customers savings in NSW for FY20

Amber annual price compared to retail reference price



Average customer savings compared to retail reference price



Notes

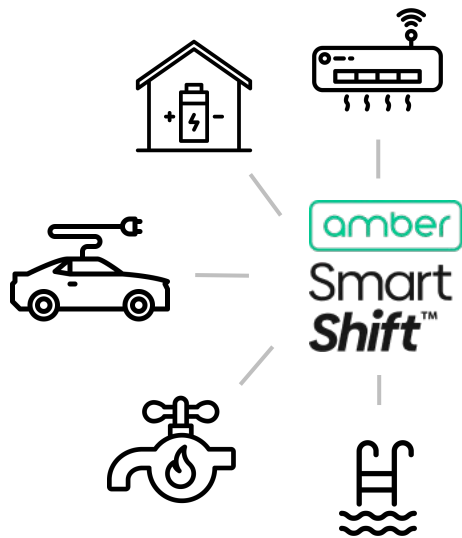
Prices include GST

Based on actual Amber customer load profiles for FY20 for customers who were with Amber for the full 12 months in the Ausgrid region.

Based on general usage data assuming all customers are on anytime network tariffs and are on Amber's carbon neutral tariff.

DMO = Default Market Offer. DMO price calculated based on Amber's daily supply charge for a customer with 4000 kWh annual usage.

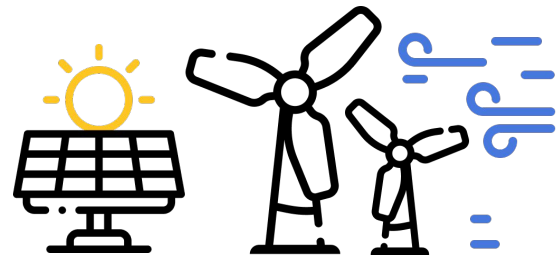
Our vision: Millions of smart devices automatically using power when cheap renewables are available



Smart devices driving demand for more renewables



Providing cheaper and greener power for customers



Currently running SmartShift™ trial in SA with support from SA government

Pool Pumps



Hot Water



Batteries



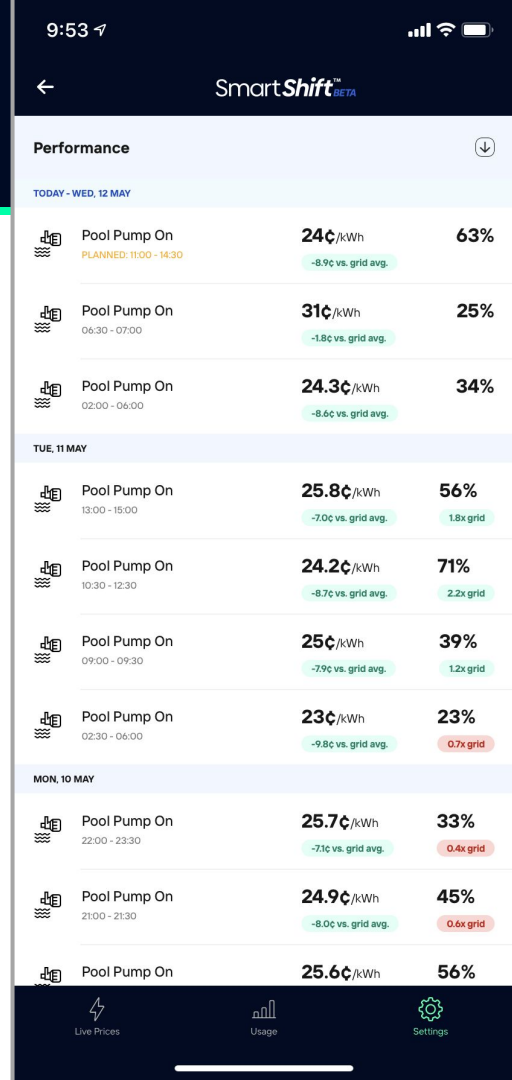
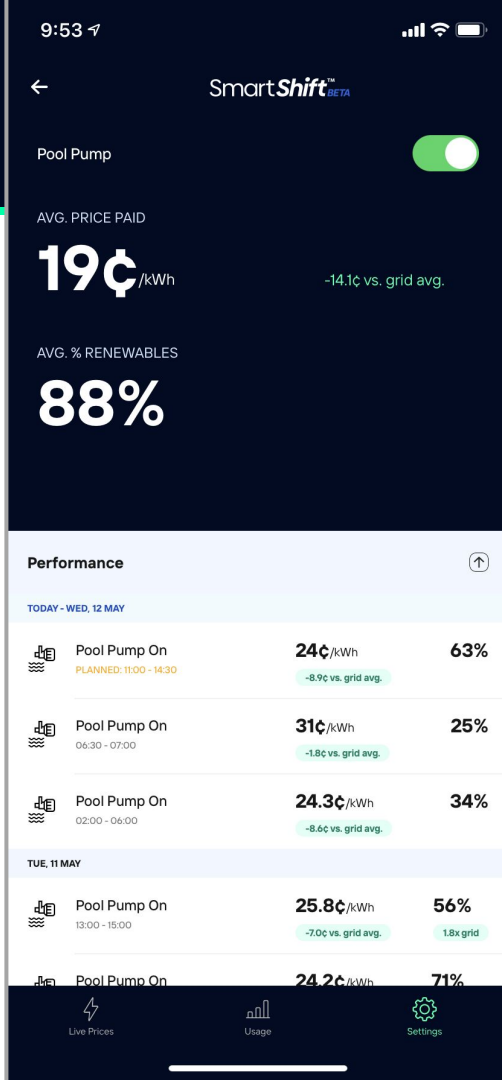
Pool pump

~90 enrolled customers

SmartShift™ customers paid on average \$0.19/kWh for pool pumping

\$0.04 less per kWh than the average wholesale price of \$0.23 and \$0.14/kWh less than the implied Default Market Offer (DMO) price of \$0.3284/kWh

This equates to \$100 annual savings compared to wholesale prices and \$350 annual savings compared to the DMO



Hot water

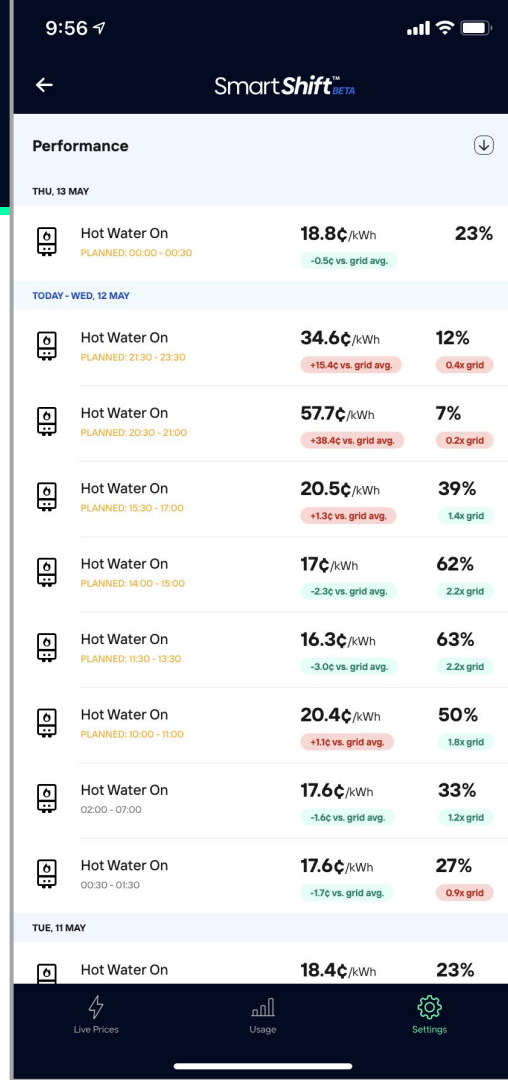
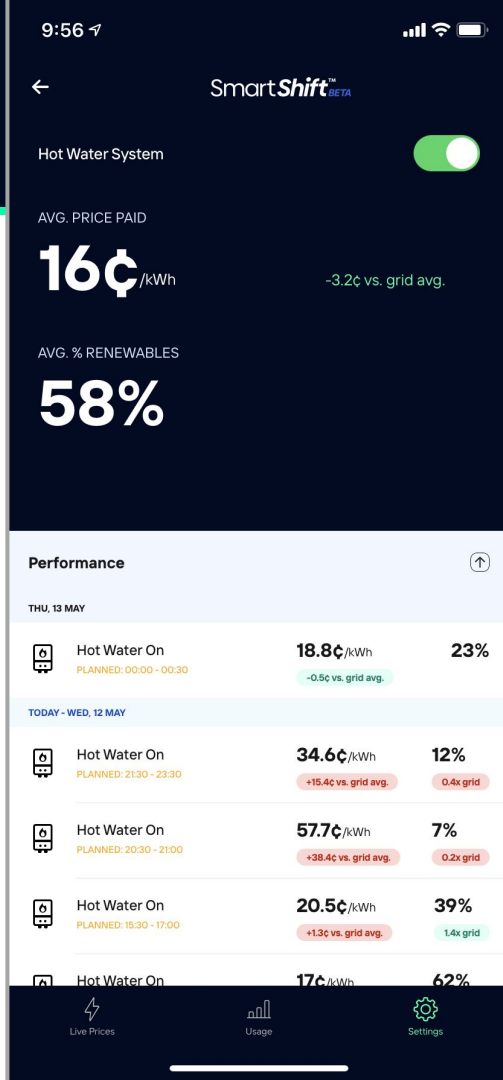
~150 enrolled customers

Smart shift customers paid on average
\$0.0419/kWh for hot water

\$0.15/kWh less than the implied Default
Market Offer (DMO) price of
\$0.1924/kWh

This equates to \$550 annual savings
compared to the DMO

Price Spike Event on 12th March 2021 -
Amber SmartShift™ hot water customers
saving approximately \$5 for the evening
in comparison to controlled load hot water
customers not on SmartShift™ program

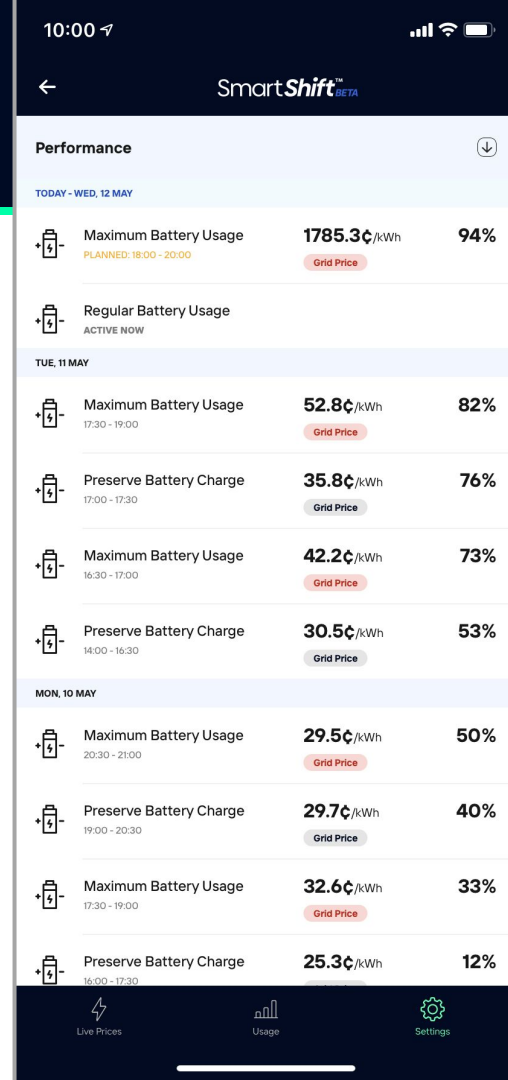
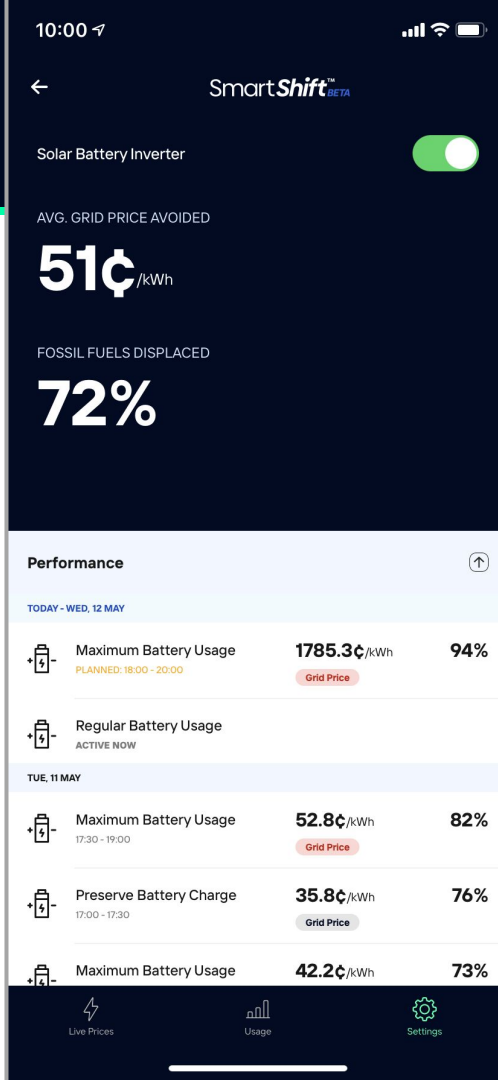


Battery

~15 enrolled customers

API integration with market leaders in Aus, aiming to add more

Price Spike Event on 12th March 2021 - battery customers exported to the grid and earned up to \$78 during the single event

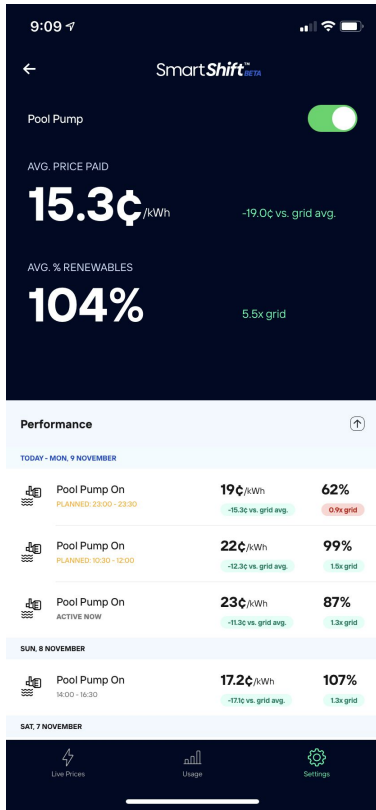


Real-life example - Heidi & Tim's pool pump



- Heidi and Tim have been an Amber customers since early 2020
- They have a 25 year old son still at home, and 2 daughters (with their families) living close by, both are Amber converts also!
- They joined SmartShift™ 15 Sept 2020 with their pool pump, which pumps 8hrs/day (at any time day/night)

Real-life example - Heidi & Tim's pool pump



- Joined SmartShift™ 15 Sept 2020
- Pumps 8 hours a day between midnight & midnight (ie no restrictions)
- Heidi used to pump every day from 20:00 - 00:00 & 02:00 - 06:00:
- The average price with NO SmartShift™ is 22.2c/kWh
- The average price WITH SmartShift™ (ie what she paid) is 15.3c/kWh
- Her pump was using around 8.8kWh every day
- **Estimated savings of 60c/day**

Next steps



Continue to onboard SA customers to beta product



Refine optimisation algorithms



Expand to other NEM states



Add additional device types



...



amberelectric.com.au/talks