

# **Electrify Everything**

Putting communities at the heart of climate solutions



# Long Time Fan...

Roseville Public School





## **About**

Rewiring Australia

Electrify 2515

Mum



# **About Electrify 2515**





# **About Rewiring Australia**

- Non-profit research & advocacy organisation dedicated to representing the people, households and communities in the energy transition.
- On a mission to electrify everything. That is, to replace all fossil fuel-based machines with efficient, electric ones powered by renewable energy.





#### **Dr Saul Griffith**

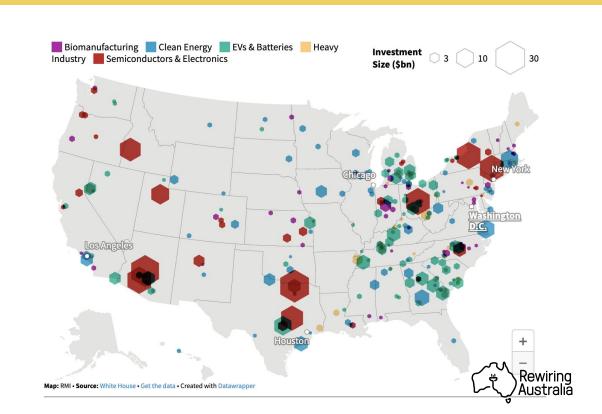
- Engineer, scientist, energy expert, visionary
- Rewiring America/Rewiring Australia founder
- Books The Big Switch etc
- Co-designed America's Inflation Reduction Act





# **US Inflation Reduction Act - 1 year on**

- Govt invested \$369 bil
- Private sector \$240 bil investment in clean tech from private sector
- 170,000 new jobs created.
   Expected to grow to 1.5 mil over the decade.
- 91 new battery manufacturing sites, 65 new or expanded EV manufacturing facilities, 84 wind and solar manufacturing announcements.



# **US Inflation Reduction Act - 1 year on**

- \$30,000 tax credits to electrify homes
- Projected to save \$2

   38bil on their
   electricity bills over a decade
- Reduce greenhouse gas emissions by approximately 1 billion tons in 2030

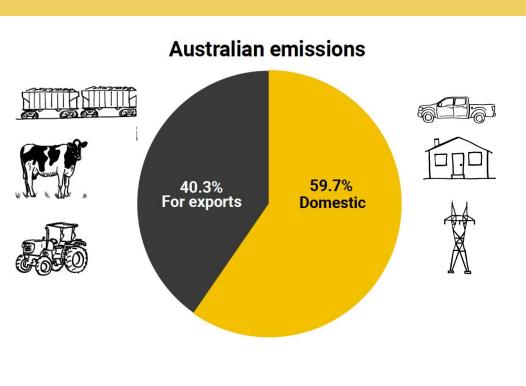
#### Australian home running costs | Conventional versus electrified



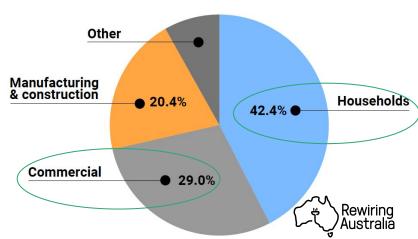
# Why electrify everything?



# We need to replace fossil fuels urgently

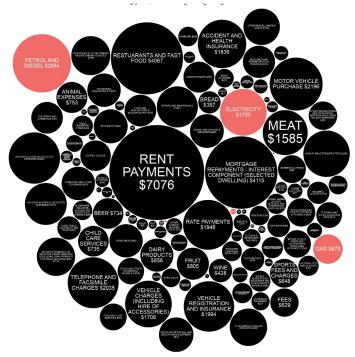






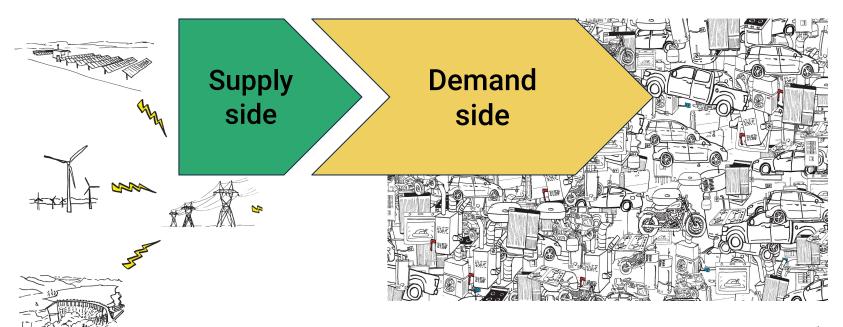
# We are in a cost of living crisis

Average household annual: ~\$80,000 expenditures ~\$5,000 energy.





# We can shape the system



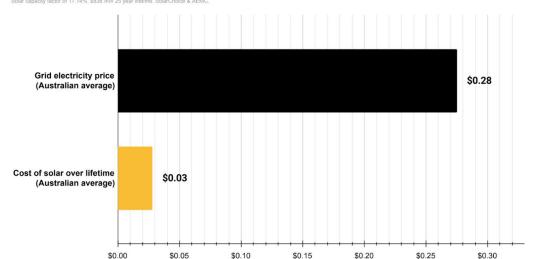


# We are the lucky country

Australia is the first country in the world where electrification will work



# Cost of grid electricity vs solar electricity (kWh) Solar capacity factor of 17.14%, \$838 kW 25 year lifetime. SolarChoice & AEMC.

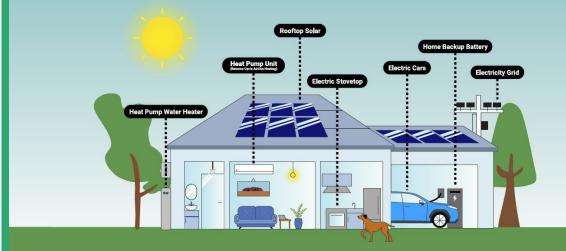




# It benefits households

- Cheaper bills
- Healthier & safer homes
- More energy independence
- Reduced carbon footprint

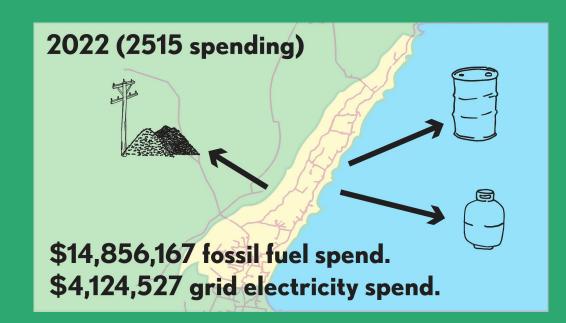






# It benefits Communities

- More resilient
- A more responsive grid
- Creates local jobs
- Supports local economy





# How?



Where we buy our electricity



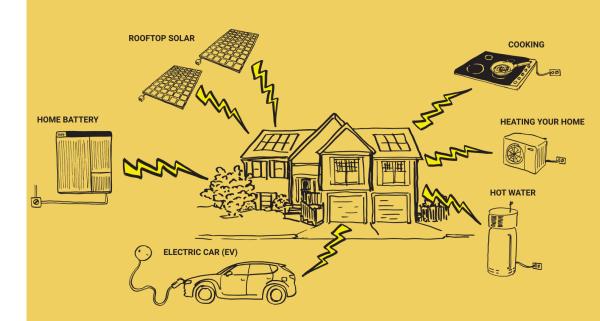
How we cook our food.

How we get to work, school, play. How we heat our homes and water.

#### **Get off fossil fuels**

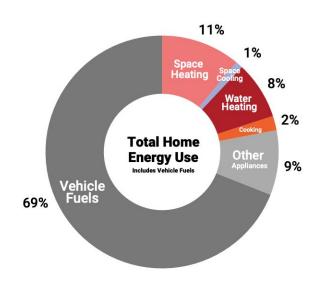
- Water heater
- Space heater
- Cooktop
- Vehicle
- Rooftop solar
- Battery storage

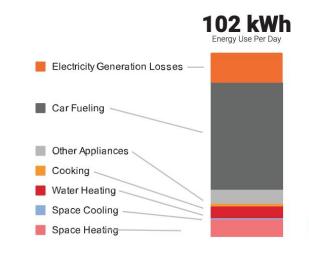
### **Electrified Home**





## **Electrification is efficiency**









#### **AVERAGE HOUSEHOLD**

CURRENT "AVERAGE"
AUSTRALIAN HOUSEHOLD

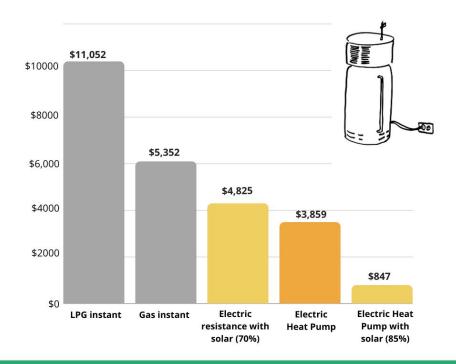
#### **ELECTRIFIED HOUSEHOLD**

ELECTRIFIED "AVERAGE"
AUSTRALIAN HOUSEHOLD



# **WATER HEATERS** | RUNNING COSTS (LIFETIME)

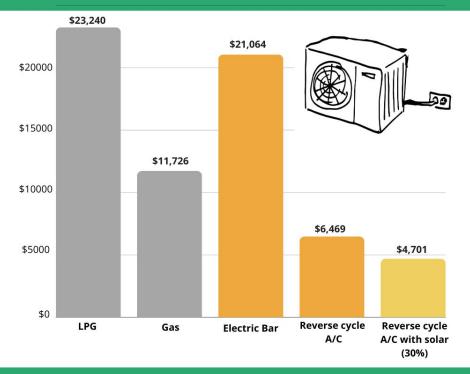
Bill comparison over 15 years, average Australian water heating needs





# **SPACE HEATERS** | RUNNING COSTS (LIFETIME)

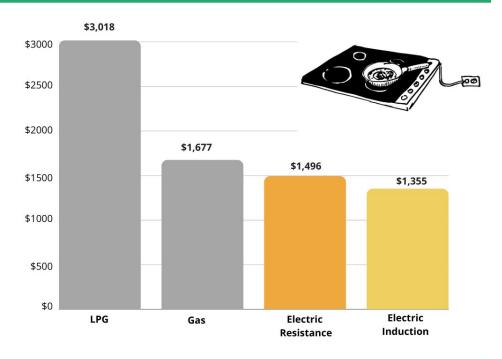
Bill comparison over 15 years, average Australian energy use





# **COOKTOPS** | RUNNING COSTS (LIFETIME)

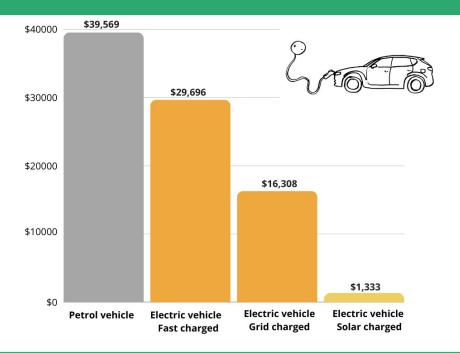
Bill comparison over 15 years, average Australian energy use





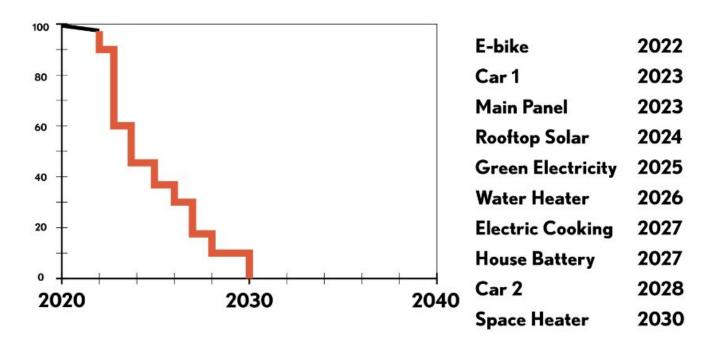
# **VEHICLES** | RUNNING COSTS (LIFETIME)

Driving cost comparison over 15 years, average Australian driving



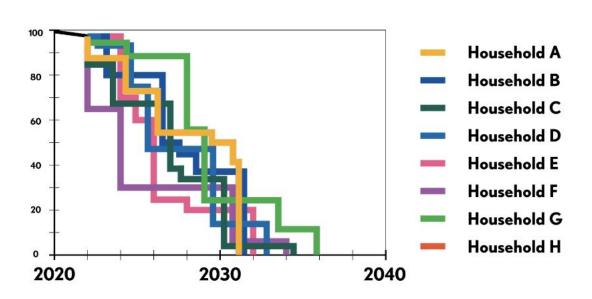


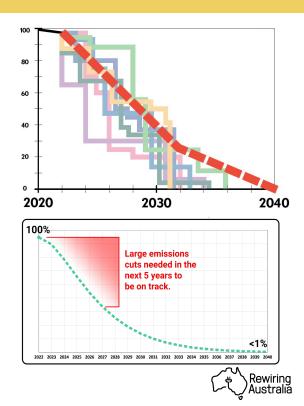
# Make a plan: for your "cold shower day"





# Help friends, family and community





# Helping everyone electrify

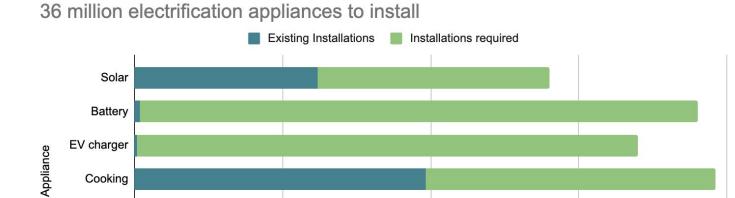
Rewiring Australia's Goal

# 10-15 year lifespan - need the changes now

2,500,000

Hot water

AC



5,000,000

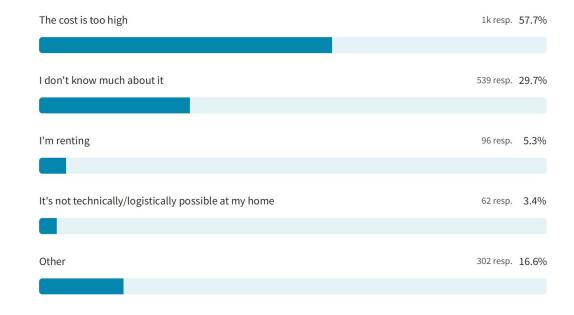
7,500,000

1 million new gas appliances sold every year



#### **Barriers to electrification**

- 1. Upfront cost
- 2. Lack of knowledge/trust
- 3. Current machine doesn't need replacing
- 4. Renter
- 5. Strata
- 6. Time





### **Our Approach**

# **Top down**

Call for the big changes needed to do electrification efficiently, equitably and rapidly





## **Bottom Up**

Raise awareness of the benefits, show that people want it, support them to do it now, empower them to ask for more





#### **Advocacy**

 Everyone can afford it -Electrify Everything Loan Scheme

2. Renter reform - Finance+ mandatory disclosure+ minimum efficiency

Electricity Market
 Reforms - Fairer system
 for households



**Email Your MP** 



# **COMMUNITY ACTION IS CRITICAL**









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NFWS

#### Wellham reckons Wagga could well electrify everything

#### Dan Holmes

FROM where Ed Wellham is sitting, net zero looks pret-

ty good.

His home is powered by a
25 kilowatt solar array, generating free power whenever
the sun shines.

It also helps heats his large swimming pool for about 80 per cent less than gas.

Mr Wellham said it took a lot of planning to power his home by renewables. But now, he wants to help the



money, and the planet. I'm

on that journey too."

Now, Electrify Wagga will
partner with Austraia's biggest renewable energy advocate, Rewiring Australia, to
help get the message out.

They were one of 10 local advocacy groups selected to help electrify their local communities.

The program has local goals identified by each group, such as increasing the amount of solar PV and hot water heat pumps in the



# Thank you

Join us! rewiringaustralia.org @rewiringaus

