

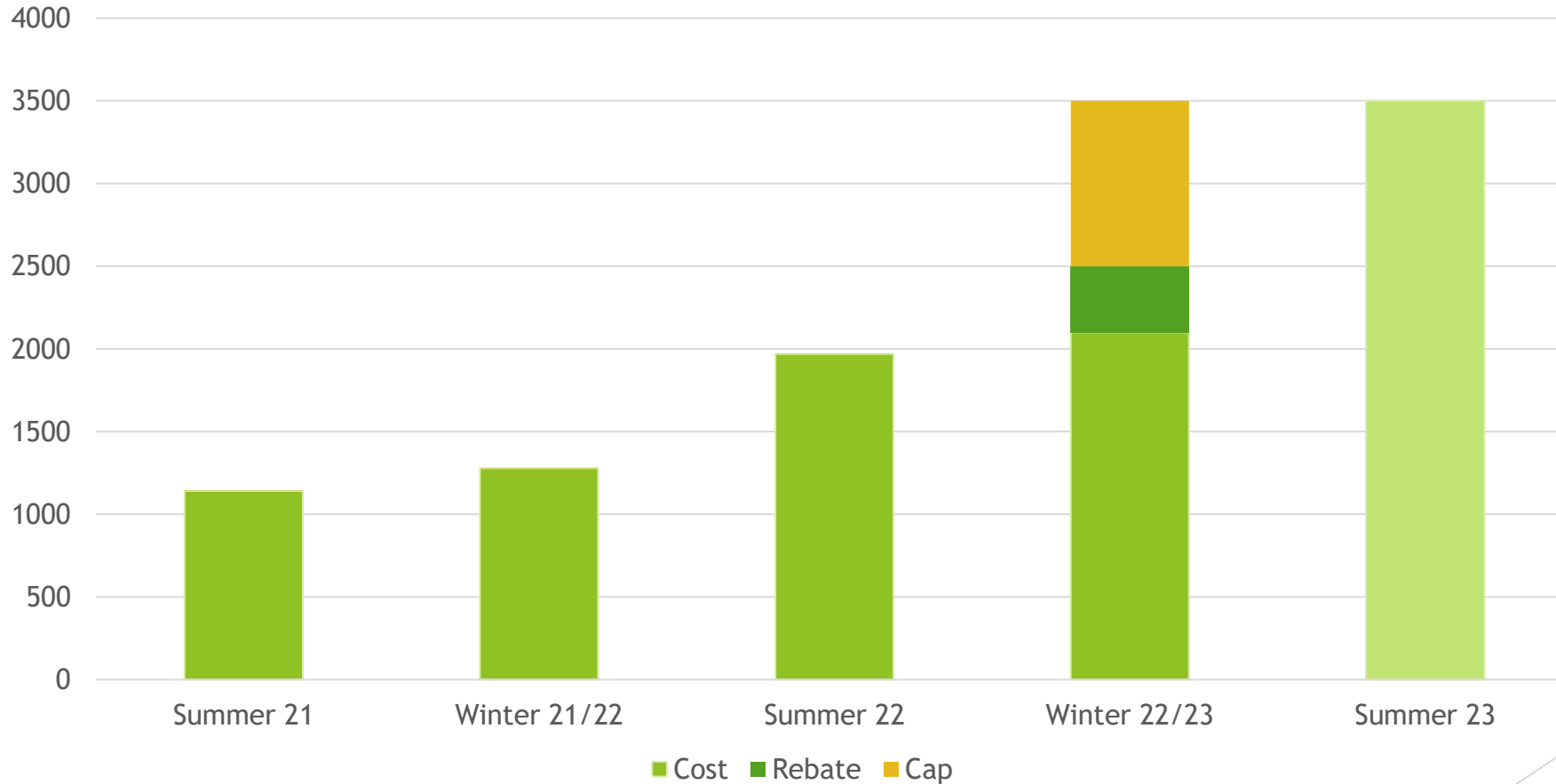
# CHANGING ECONOMICS OF HOME ENERGY

Buckland Low Carbon Network

18<sup>th</sup> October 2022

# COST OF DOMESTIC ENERGY

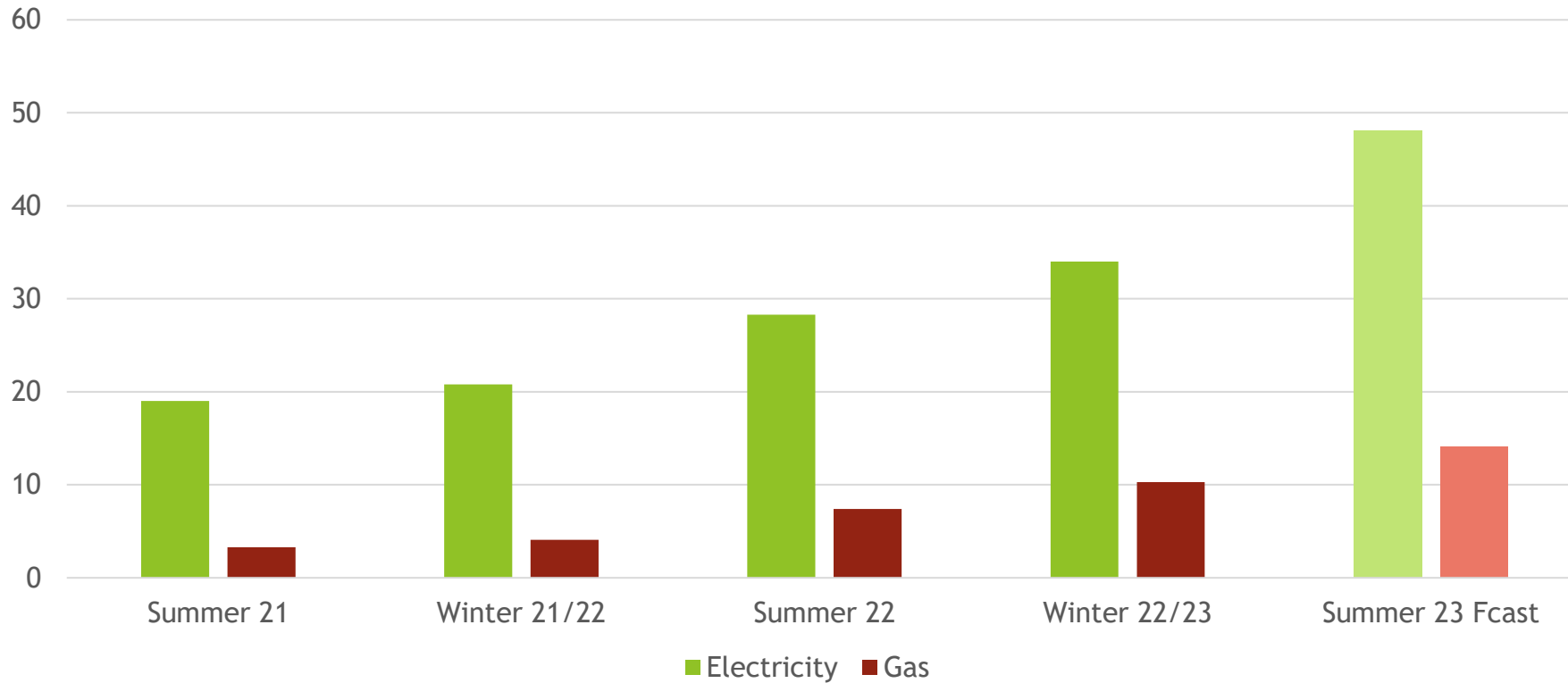
Average annual household energy bills, £



Summer 23 based on OFGEM October 22 prices, after the planned removal of government subsidies and rebates  
Note: Additional assistance available for winter 22/23 for pensioners and people on benefits

# PRICE OF DOMESTIC ENERGY

Average prices



Cost Ratio: 5.8

5.1

3.8

3.3

3.4

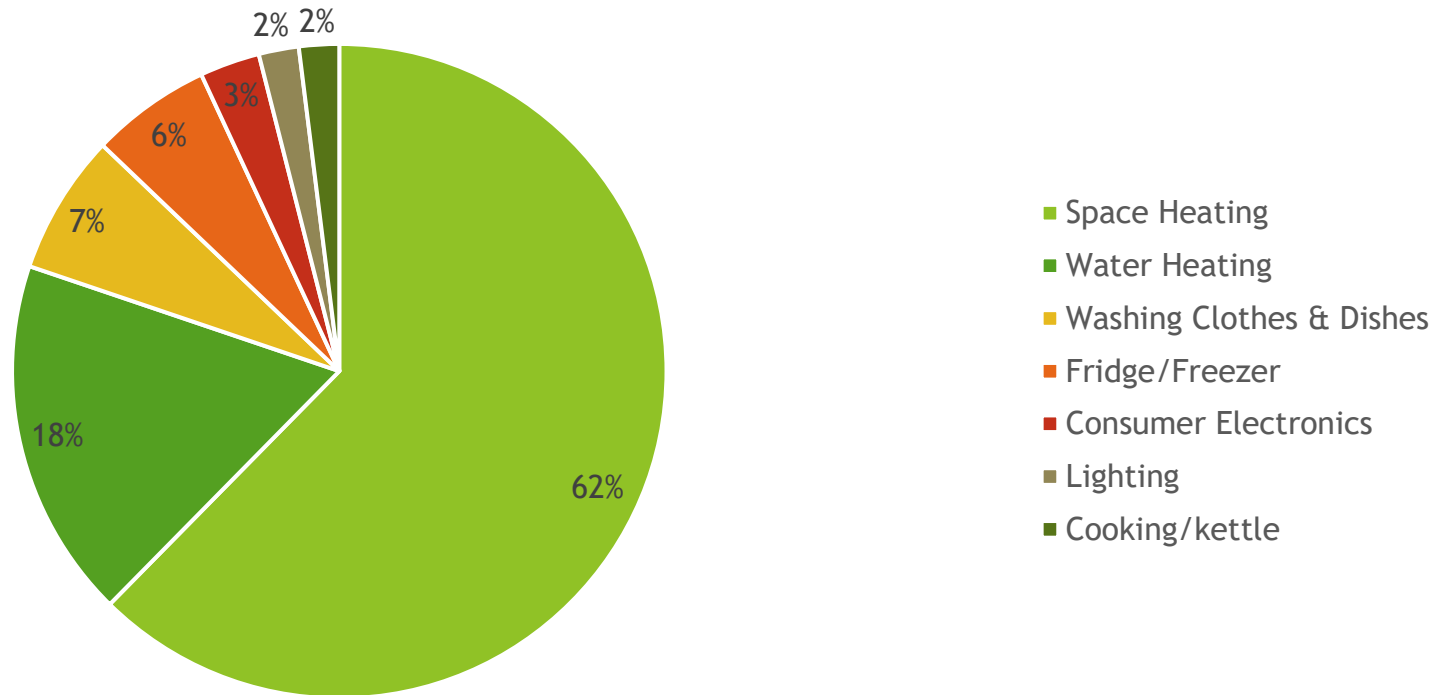
Source: House of Commons Energy Briefing

Note: Summer 23 forecast based on OFGEM October prices, with cap and rebate ending March 2023

Cost Ratio is ratio of electricity to gas prices per kWh

# AVERAGE UK HOUSEHOLD ENERGY CONSUMPTION

100% = 17,200 kWh pa



Sources: House of Commons Research Briefing; Energy Saving Trust

# REDUCING YOUR ENERGY BILLS: EASY WINS

Potential reductions of >1% of annual average household energy bills without significant investment, at October 22 energy prices

	Potential Annual Saving	Potential Annual Carbon Saving kg
▶ Draught proof doors/windows/chimneys	£150	250-300
▶ Close curtains/blinds at night	£ 90	150-200
▶ Upgrade hot water tank insulation	£ 80	140-180
▶ Turn thermostat down 1 degree	£ 80	140-180
▶ Air dry clothes (not tumble dry)	£ 70	50-70
▶ Switch off stand-by power on appliances	£ 65	45-65
▶ LED light bulbs	£ 60	40-60
▶ Wash clothes on cold wash	£ 35	25-45

Source: Energy Saving Trust, assumes gas space and water heating

# REDUCING YOUR ENERGY BILLS & EMISSIONS

## INVESTING FOR GREATER IMPACT

Average detached or semi-detached house, Oct 22 energy prices

	Typical Installation Cost	Payback Period	CO2 reduction (kg pa)
<b>REDUCING HEAT LOSS:</b>			
▶ Wall insulation: Cavity Wall	£1000-2000	2-3 years	700-1200
▶ Wall insulation: Solid Wall	£8000-20000	15-20 years	1000-1500
▶ Roof insulation: from none	£500-650	1-2 years	600-1000
▶ Roof insulation: from 120mm	£400-600	8-12 Years	50-100
▶ Floor insulation	£1500-3000	12-18 years	200-300
▶ Double glazing	£5000-10,000	30-35 years	300-400
<b>GENERATING ALTERNATIVE ENERGY:</b>			
▶ Renewable heating (heat pump)*	£2000-8000 (net)	5-20 years	2000-3000
▶ Solar panels	£4000-7000	10-15 years	700-900
▶ Solar water heating	£3000-5000	20-30 years	250-350

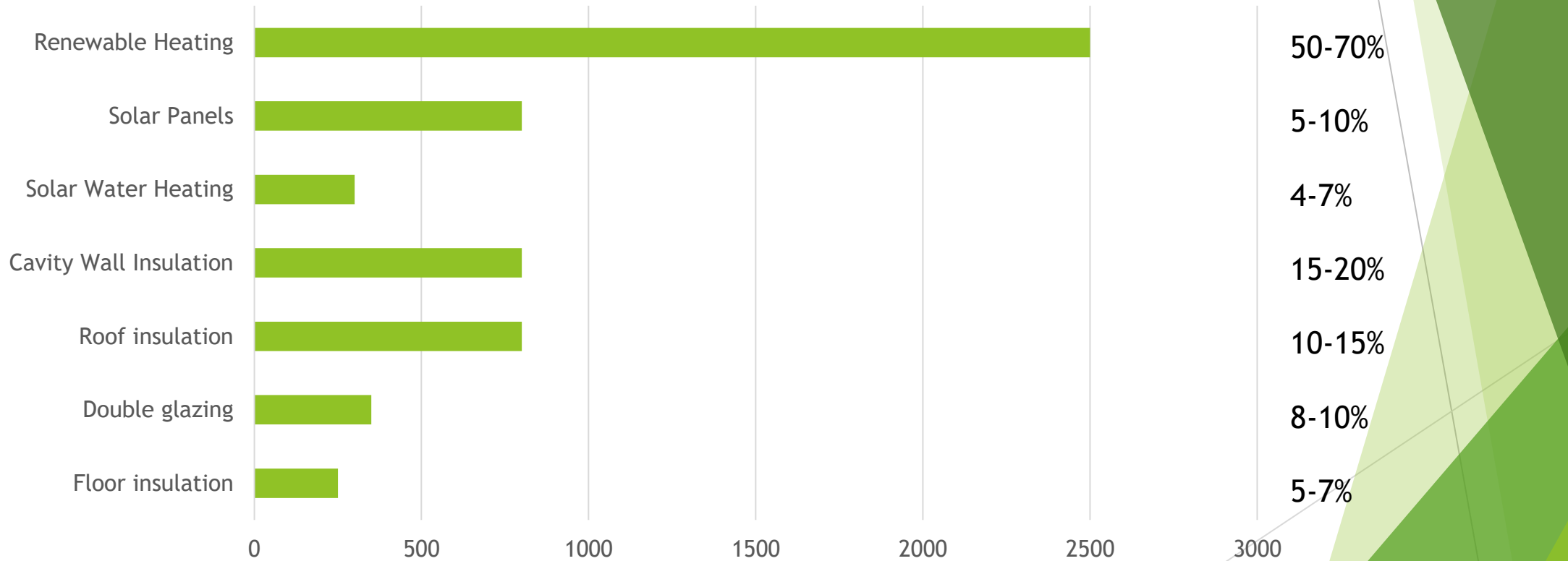
Source: Energy Saving Trust

\* Air source heat pump savings compared to old gas boiler, with Renewable Heat Incentive

# REDUCING YOUR ENERGY BILLS & EMISSIONS

## AVERAGE CARBON SAVINGS

Average detached or semi-detached house



Source: Data from Energy Saving Trust  
Renewable Heating based on air source heat pump

# FURTHER INFORMATION

- ▶ Advice on energy saving options: Energy Saving Trust:  
<https://energysavingtrust.org.uk/energy-at-home/>
- ▶ Public Policy Context: House of Commons briefing on domestic energy prices:  
<https://researchbriefings.files.parliament.uk/documents/CBP-9491/CBP-9491.pdf>