



# NET ZERO HEROES: Scaling Efficient Appliances for Climate Change Mitigation, Adaptation & Resilience

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Efficient Appliances for People & the Planet

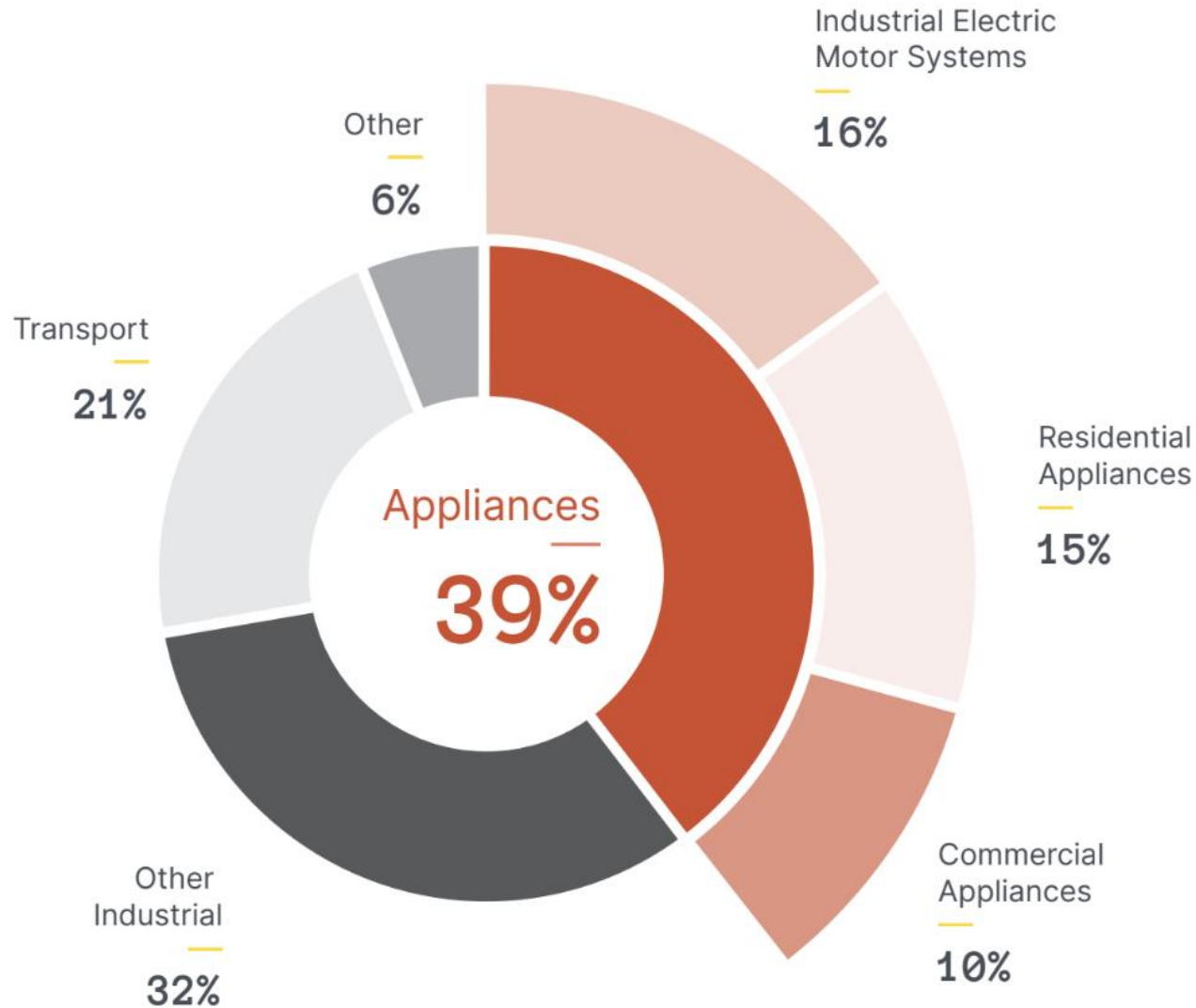


# MISSION



CLASP improves the energy and environmental performance of the appliances & equipment we use every day, accelerating our transition to a more sustainable world.

# Appliances have a major impact on our climate



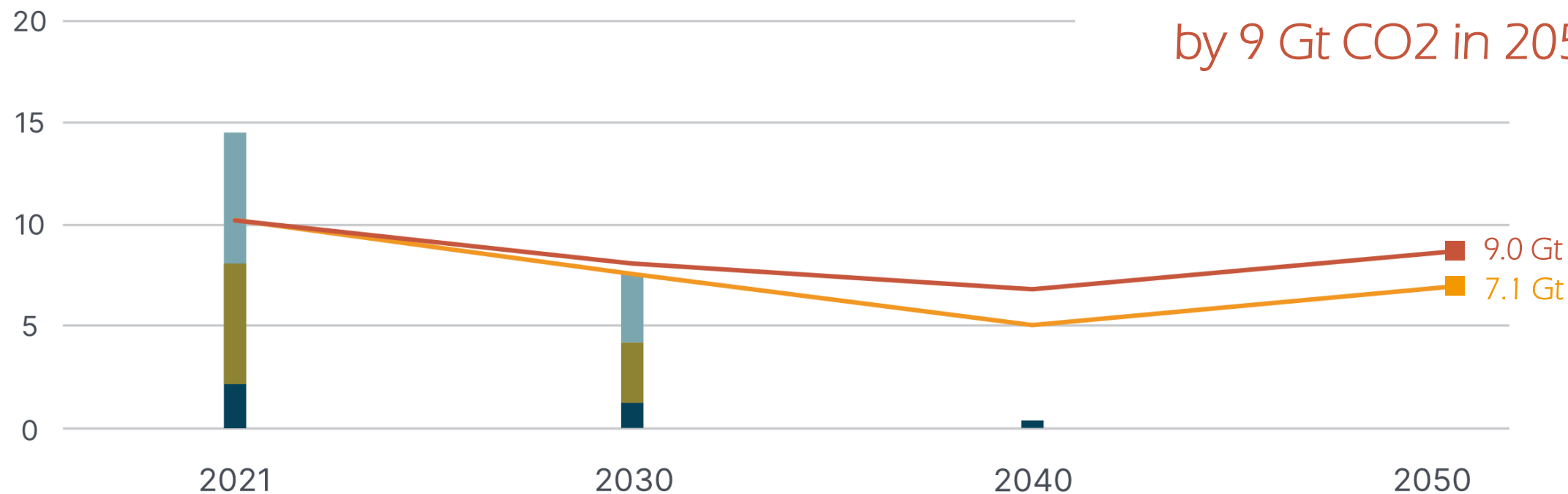
Appliances are responsible for **39.3%** of energy-related CO<sub>2</sub> emissions.

These emissions are equal to roughly the total CO<sub>2</sub> emissions from **China, Europe, and Brazil.**

## CO<sub>2</sub> Emissions Under Business as Usual (BAU) & Global Benchmarks Scenario

Under business as usual, appliances would overshoot Net Zero Emissions by 9 Gt CO<sub>2</sub> in 2050

CO<sub>2</sub> Emissions (Gt)



- Residential and Commercial Net Zero Indirect Emissions Target from IEA
- Industrial Electric Motor Systems Net Zero Target from IEA
- Residential Net Zero Direct Emissions Target from IEA

- Global Benchmarks
- Business as Usual



At the same time, billions of people do not own the appliances needed to live healthy, productive lives.

Many of the countries with the largest appliance access gaps are also most at risk to the dangers of climate change.  
3.6 billion people live in regions highly vulnerable to climate change.

But a clear pathway  
to planet- and  
people-friendly  
appliances exists

CLASP has identified the ten appliances that should  
form the basis of an unprecedented efficiency push:

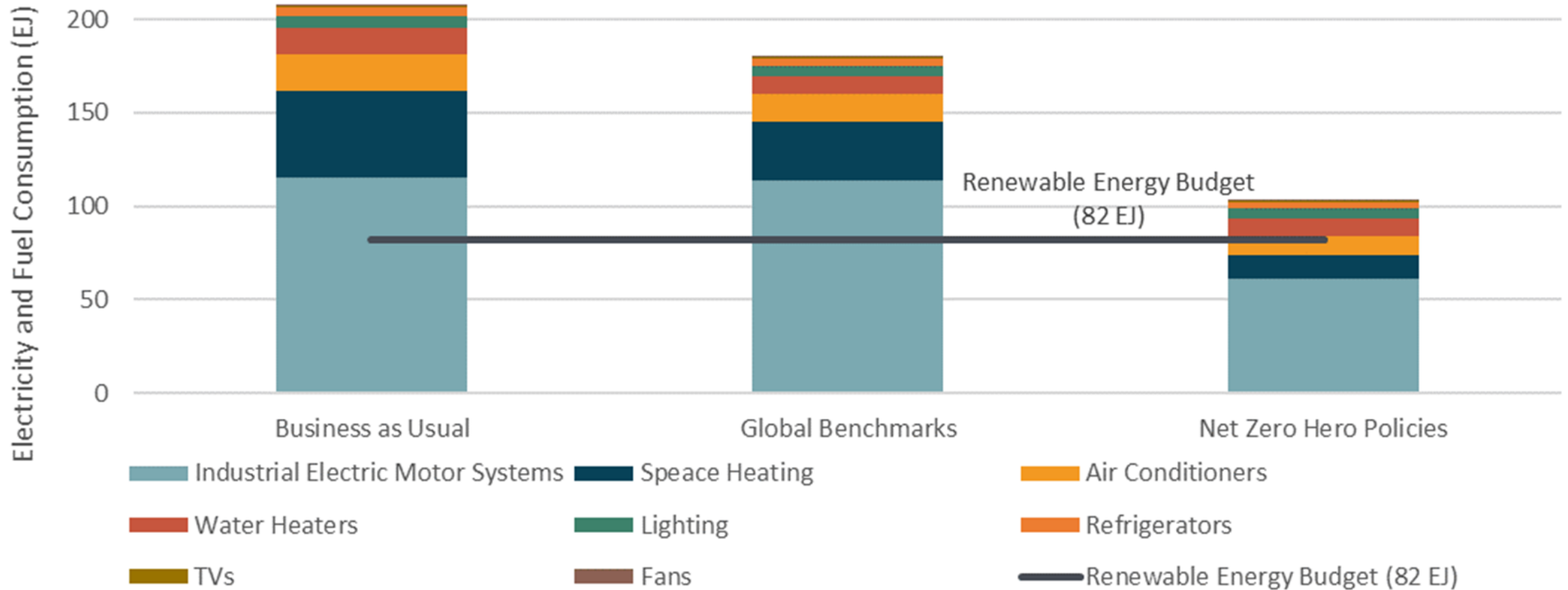
**THE NET ZERO HEROES**





# Net Zero Hero Targets

Ambitious policy targets get appliances within 21 EJ of the renewable energy budget in 2050.





# MEETING CLASP'S NET ZERO HERO TARGETS WOULD:

- **Avoid 9.2 Gt of CO<sub>2</sub> in 2025** relative to BAU, enabling appliances to do their part in meeting IEA's Net Zero goal
- **Reduce exposure to climate risks and improve quality of life** through enhanced food security and economic opportunity **for over 100 million people**
- **Improve health outcomes for nearly 100 million people**

# Net Zero Heroes

Scaling Efficient Appliances for Climate Change  
Mitigation, Adaptation & Resilience



<https://www.clasp.ngo/report/net-zero-heroes/>

## Select Recommendations

1. Increase the stringency of appliance policies and the frequency of revision at the speed and scale needed to achieve Net Zero Hero targets
3. Plan, track, and measure
5. Collaborate internationally to stop the dumping of inefficient appliances

There is an immediate opportunity to prioritize efficient appliances in national climate plans



Governments need to translate the COP28 commitment to **“double the global average annual rate of energy efficiency improvements by 2030”** into NDCs by March 2025.

**Including clear, evidence-based appliance efficiency targets is key to achieving net zero goals.**

**COMING IN SEPTEMBER**

# **NDC TOOLKIT**



- **Ready-to-use tool to analyze mitigation potential for eight of the highest energy-consuming appliances**
- **Model language with clear net-zero-aligned appliance targets**
- **Links to additional tools and publications for further info**



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**THANK YOU!**