



Consumer preferences and energy system integration

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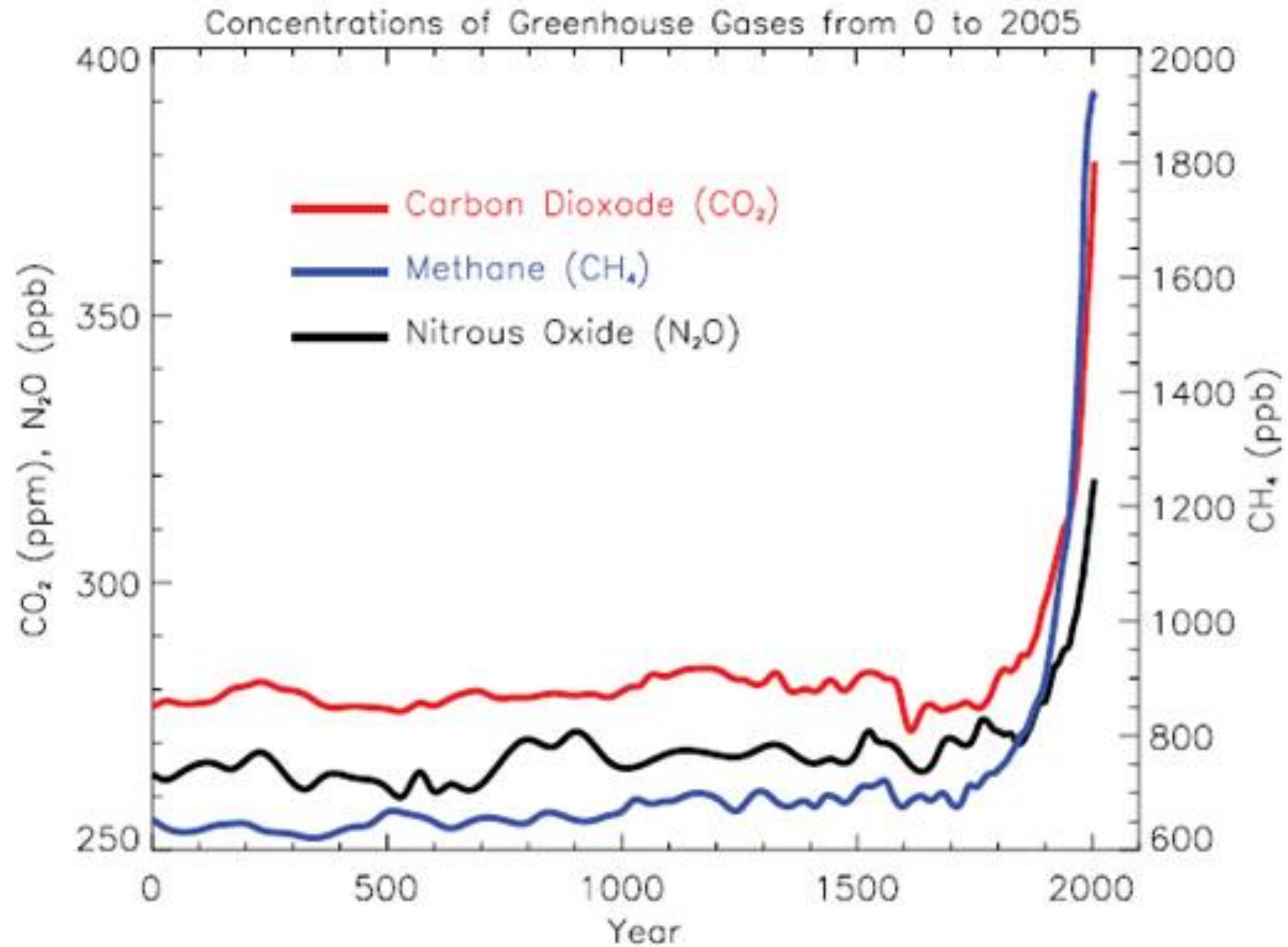
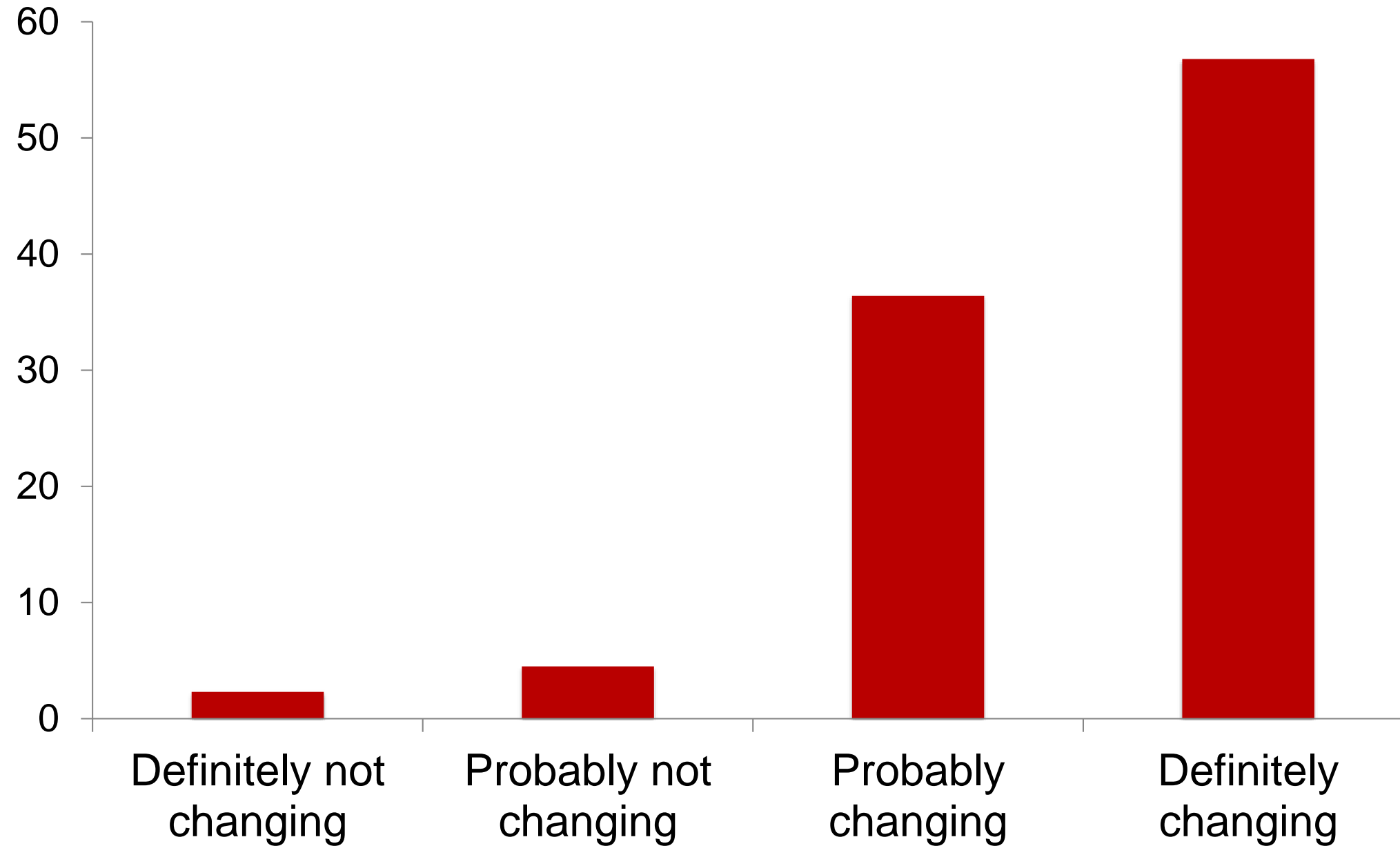
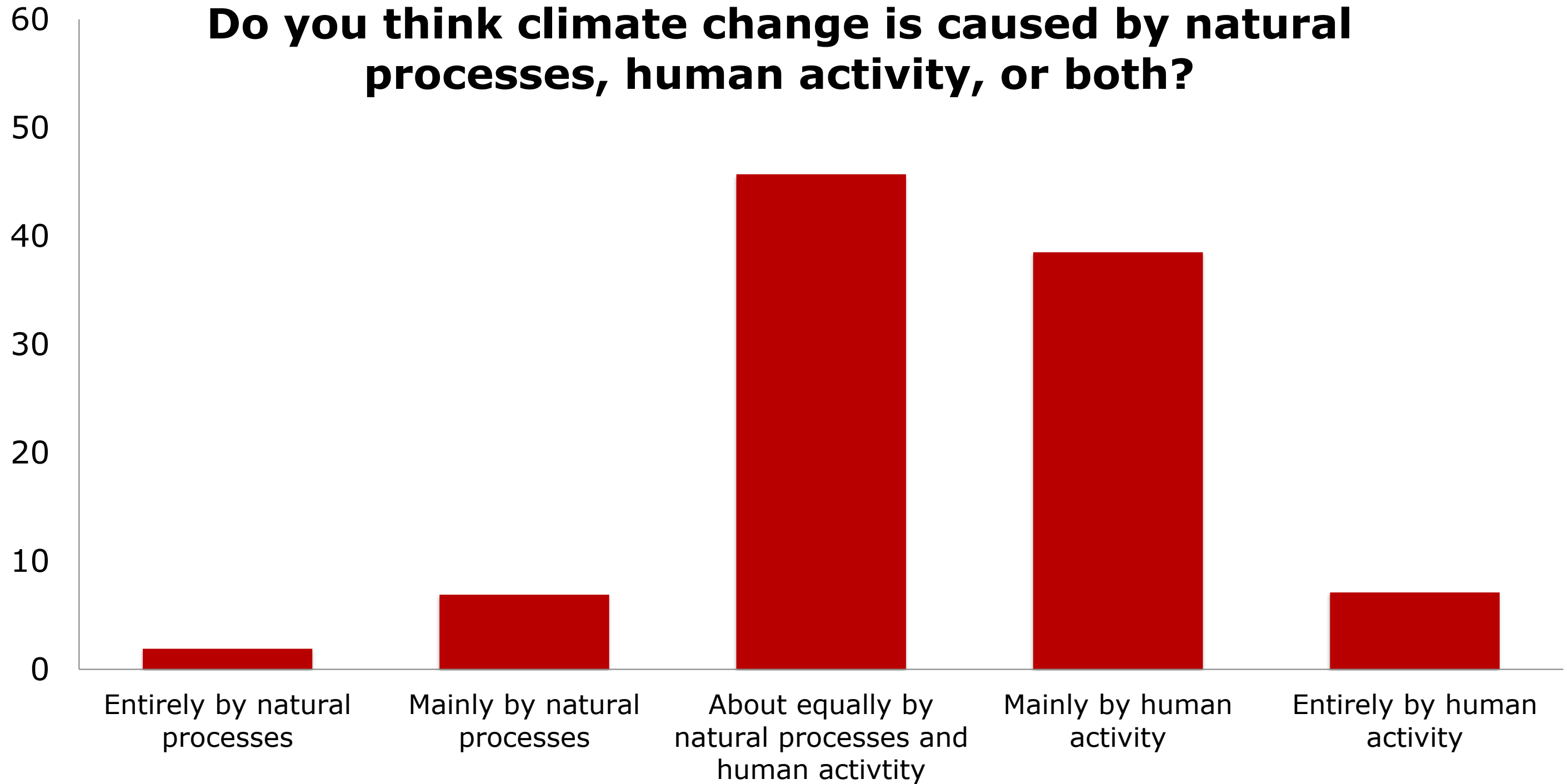


Figure 1. Atmospheric concentrations of important long-lived greenhouse gases over the last 2,000 years. Increases since about 1750 are attributed to human activities in the industrial era. Concentration units are parts per million (ppm) or parts per billion (ppb), indicating the number of molecules of the greenhouse gas per million or billion air molecules, respectively, in an atmospheric sample.

Do you think the world's climate is changing?



Do you think climate change is caused by natural processes, human activity, or both?



Psychology and ESI

- › Which behaviour is critical for ESI?
- › Which factors influence the behaviour?
- › Which strategies can be implemented to change these factors and behaviour
 - Acceptability and expected effects

Sustainable energy behaviour







De Groot & Steg (2007, 2008), De Groot, Steg, Keizer, Farsang, Watt (2012), Jakovcevic & Steg (2013), Steg, Abrahamse, & Dreijerink (2005); Hiratsuka, Perlaviciute & Steg (2018), Ünal, Granskaya & Steg (2019)

Promoting sustainable energy behaviour

- › Information: if people would know, they would change their behaviour
- › Extrinsic motivation: make pro-environmental actions more attractive
- › Intrinsic motivation

10 Worst Environmental Issues Facing Our Planet

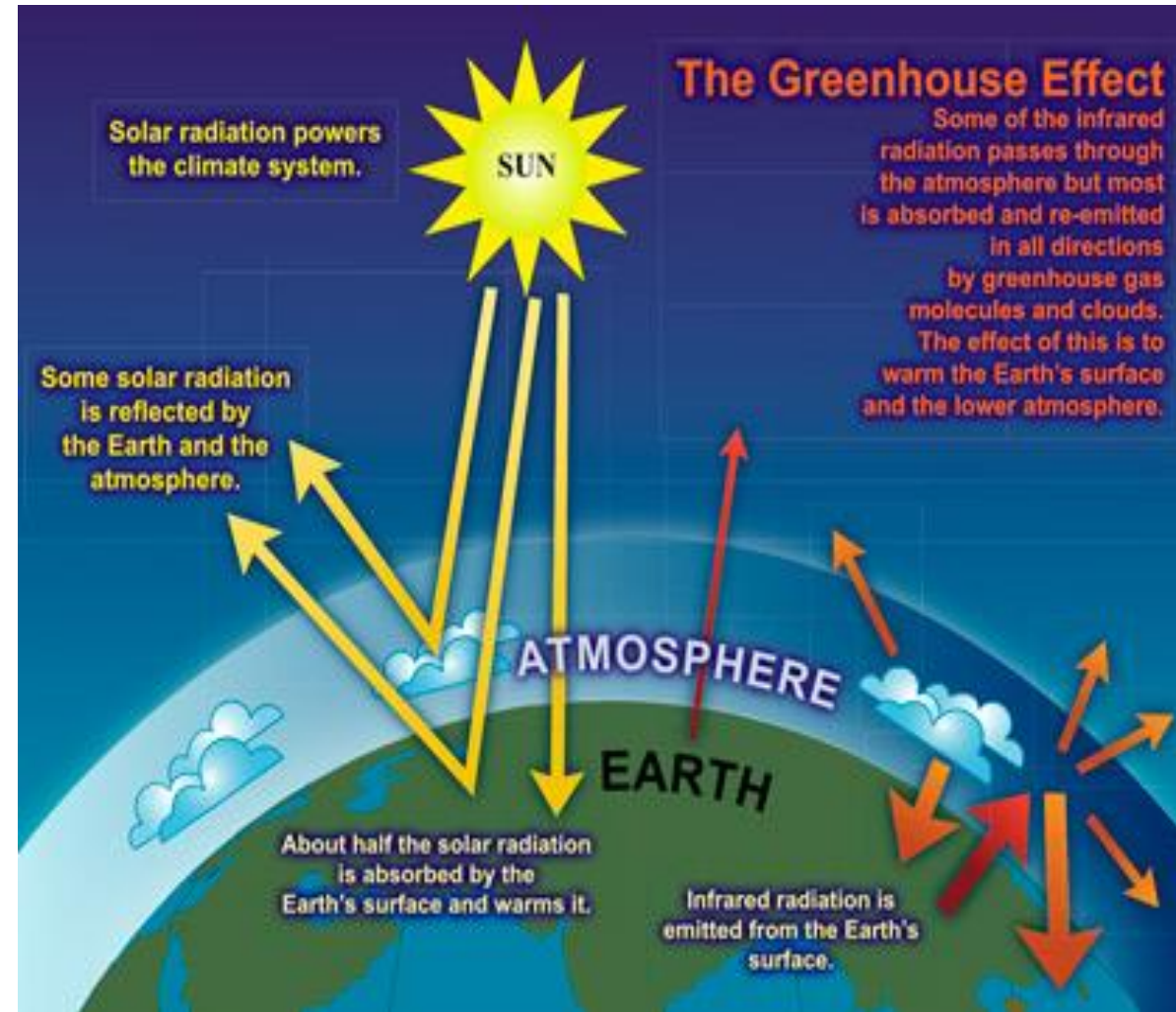


Where does the metal you recycle end up?

Recycle your cans, tins, foil and aerosols and make your metals matter!

You can recycle metal packaging in your red recycling bin along with lots of other things.

www.warwickdc.gmx.uk/recycling





Donald J. Trump ✓
@realDonaldTrump



In the East, it could be the COLDEST New Year's Eve on record. Perhaps we could use a little bit of that good old Global Warming that our Country, but not other countries, was going to pay TRILLIONS OF DOLLARS to protect against. Bundle up!

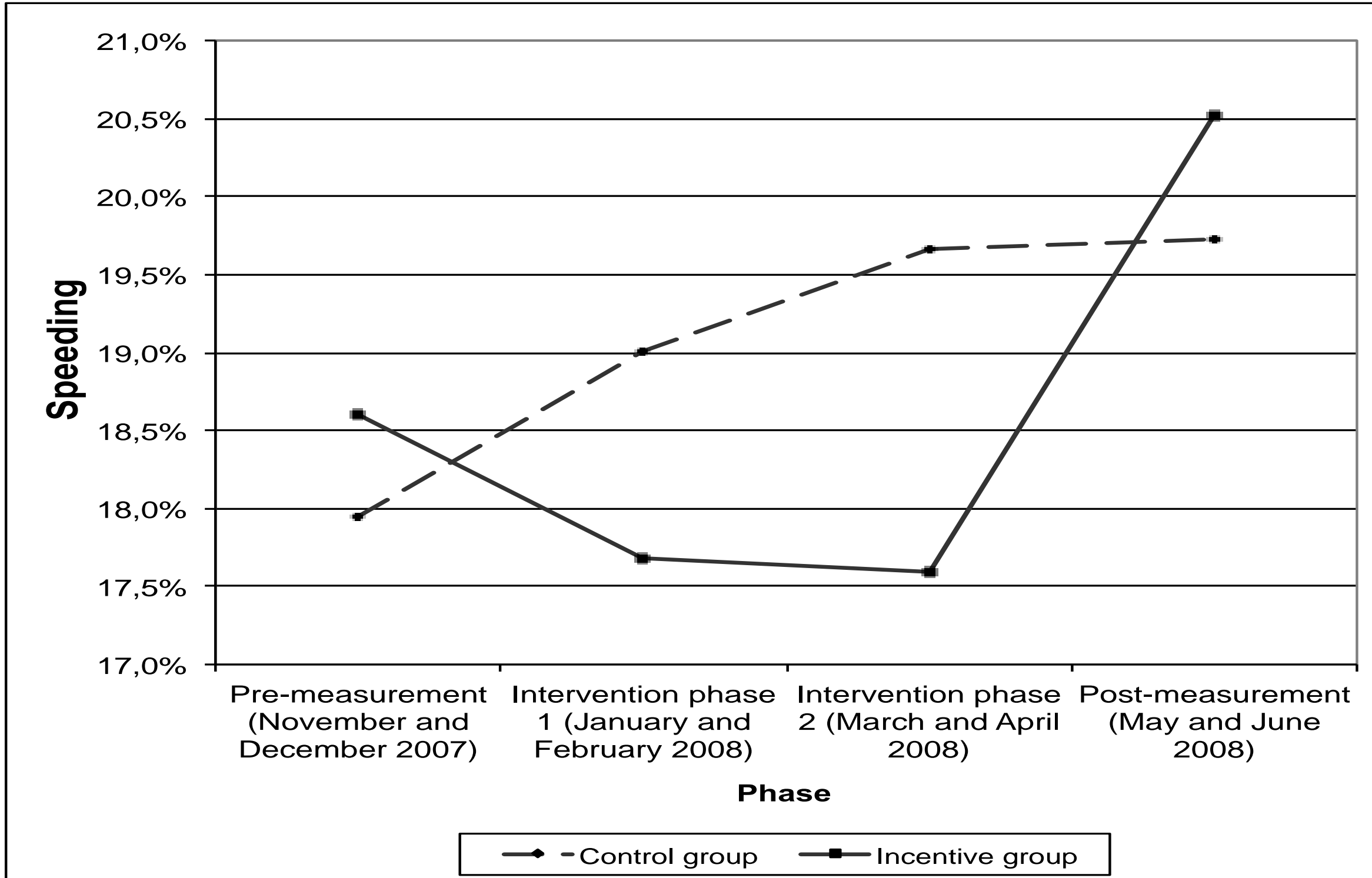
1:01 AM - Dec 29, 2017

137,515 66,670 208,732



Values and persuasion





Environment

Do You Care About the Environment?

Take a coupon for a FREE professional tire check!



Source: www.fueleconomy.gov

- Like balloons, your tires lose pressure over time.
- Improper tire pressure increases fuel consumption which *harms our environment*.
- Properly inflating tires cuts back vehicle emissions.



Participating stations:

Snappy Lube #23
1402 N. Main Street
Blacksburg, VA 24060

Snappy Lube #24
2405 Market Street
Christiansburg, VA 24073

Money

Do You Care About your Finances?

Take a coupon for a FREE professional tire check!



Source: www.fueleconomy.gov

- Like balloons, your tires lose pressure over time.
- Improper tire pressure increases fuel consumption, which is expensive.
- Properly inflating cuts back fuel costs.



Participating stations:

Snappy Lube #23
1402 N. Main Street
Blacksburg, VA 24060

Snappy Lube #24
2405 Market Street
Christiansburg, VA 24073

Control

Take a coupon for a FREE professional tire check!



Source: www.fueleconomy.gov

- Like balloons, your tires lose pressure over time.
- The average U.S. driver travels 12,000 miles yearly.
- Not everyone checks their tires regularly.

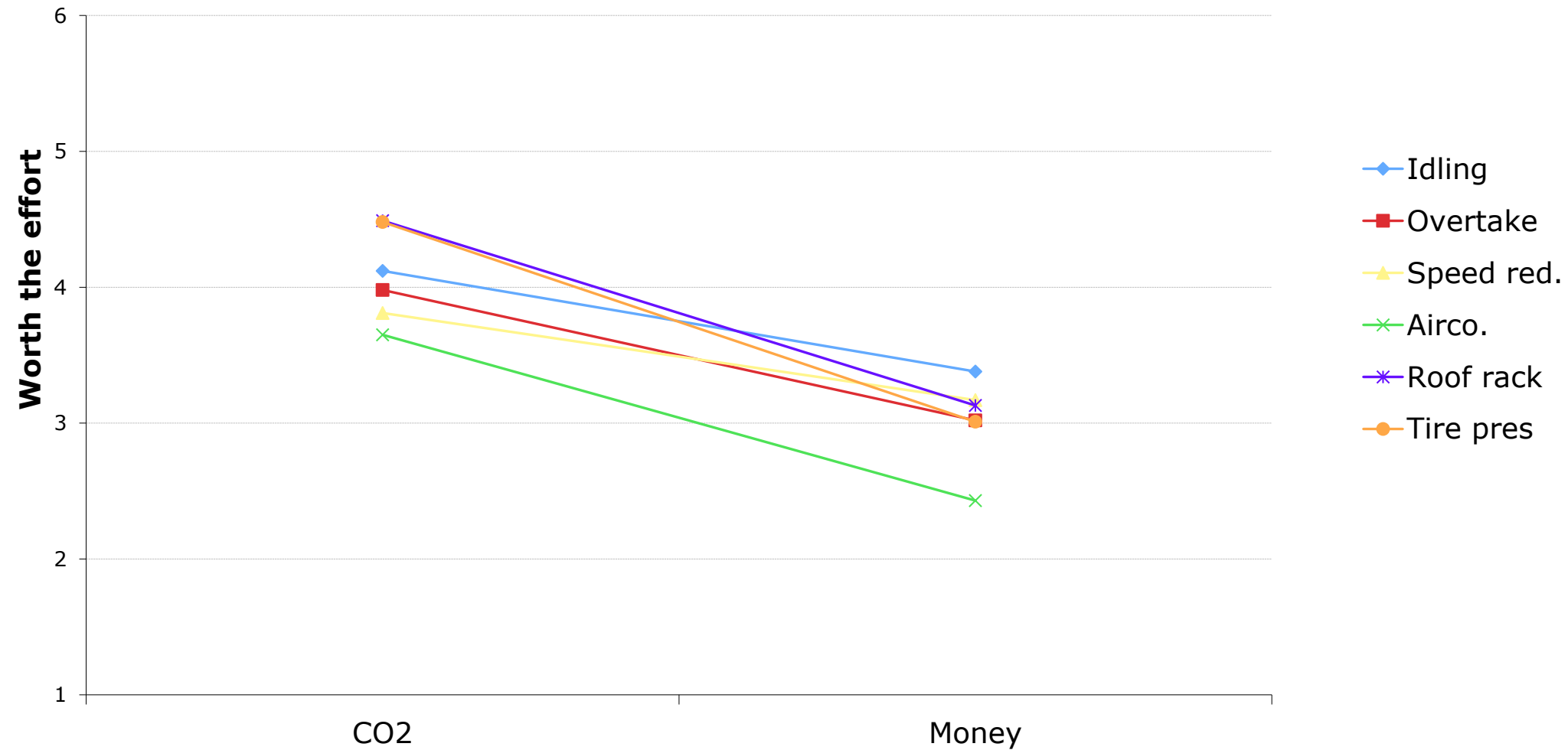


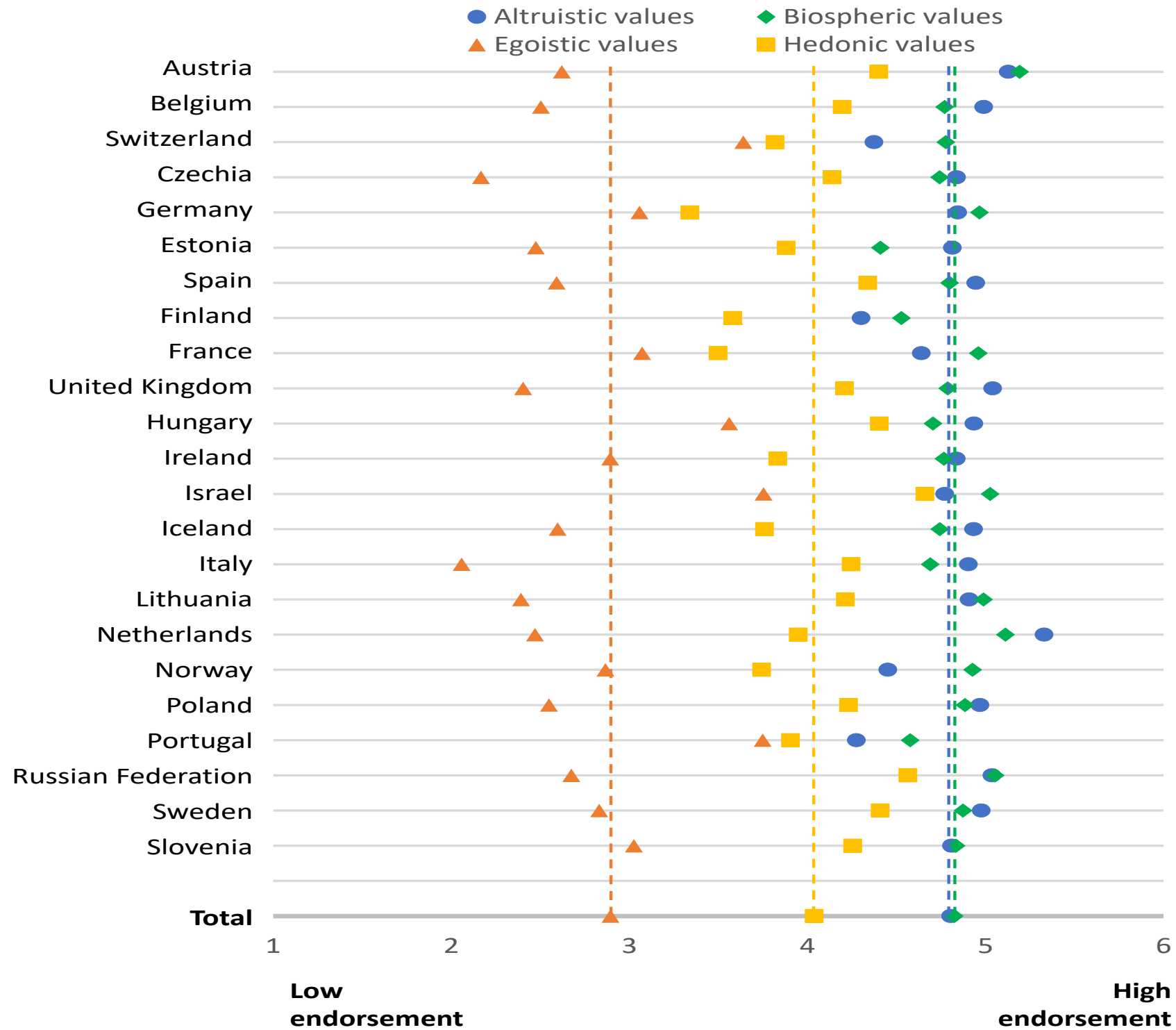
Participating stations:

Snappy Lube #23
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2405 Market Street

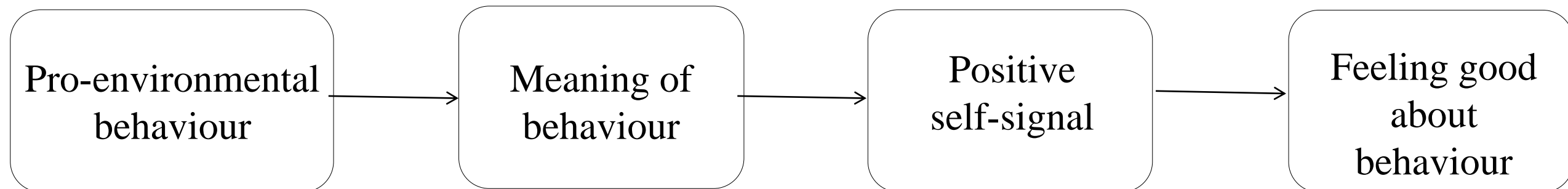
Worthiness savings € or CO₂



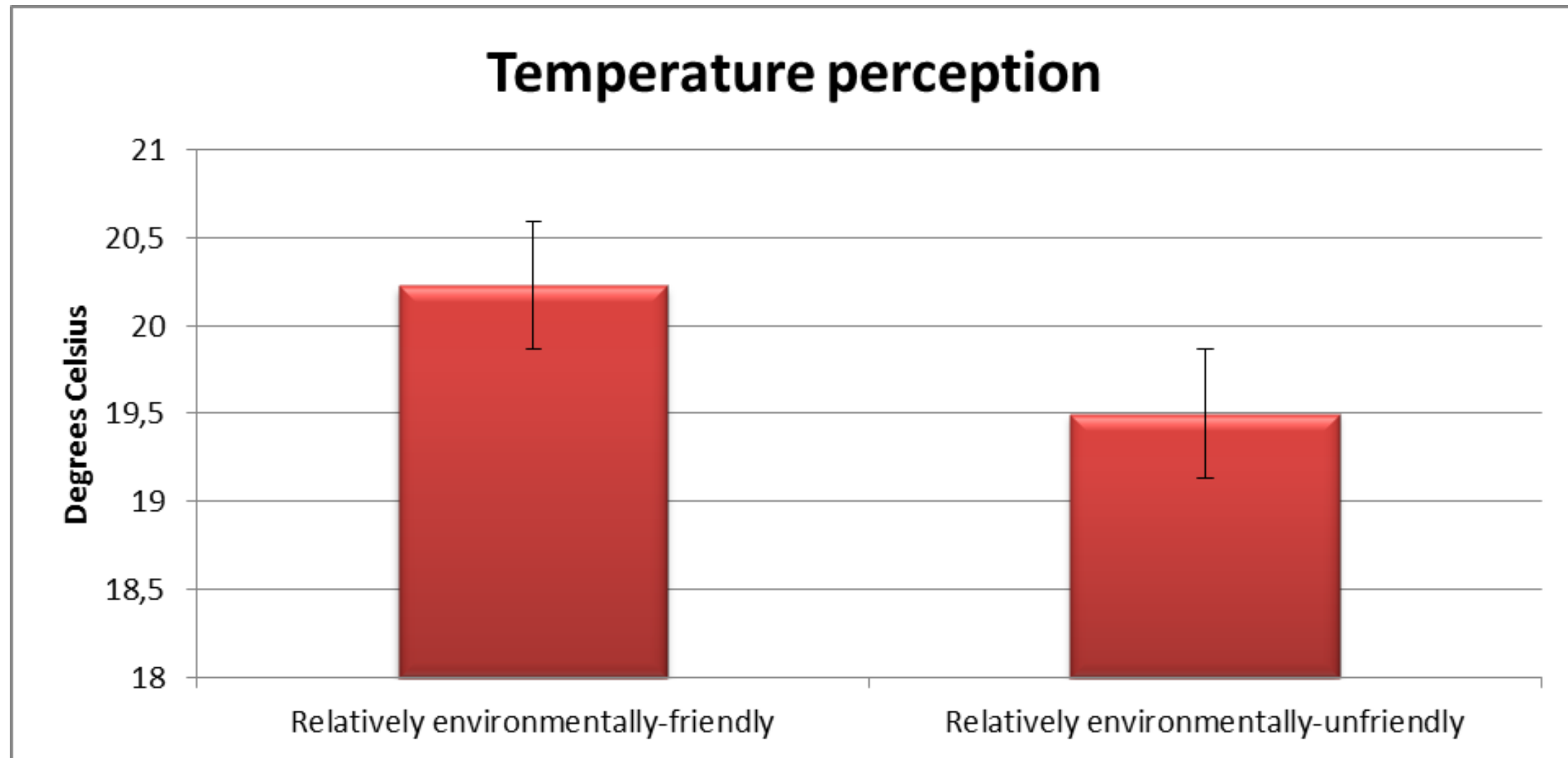


Eudaimonia

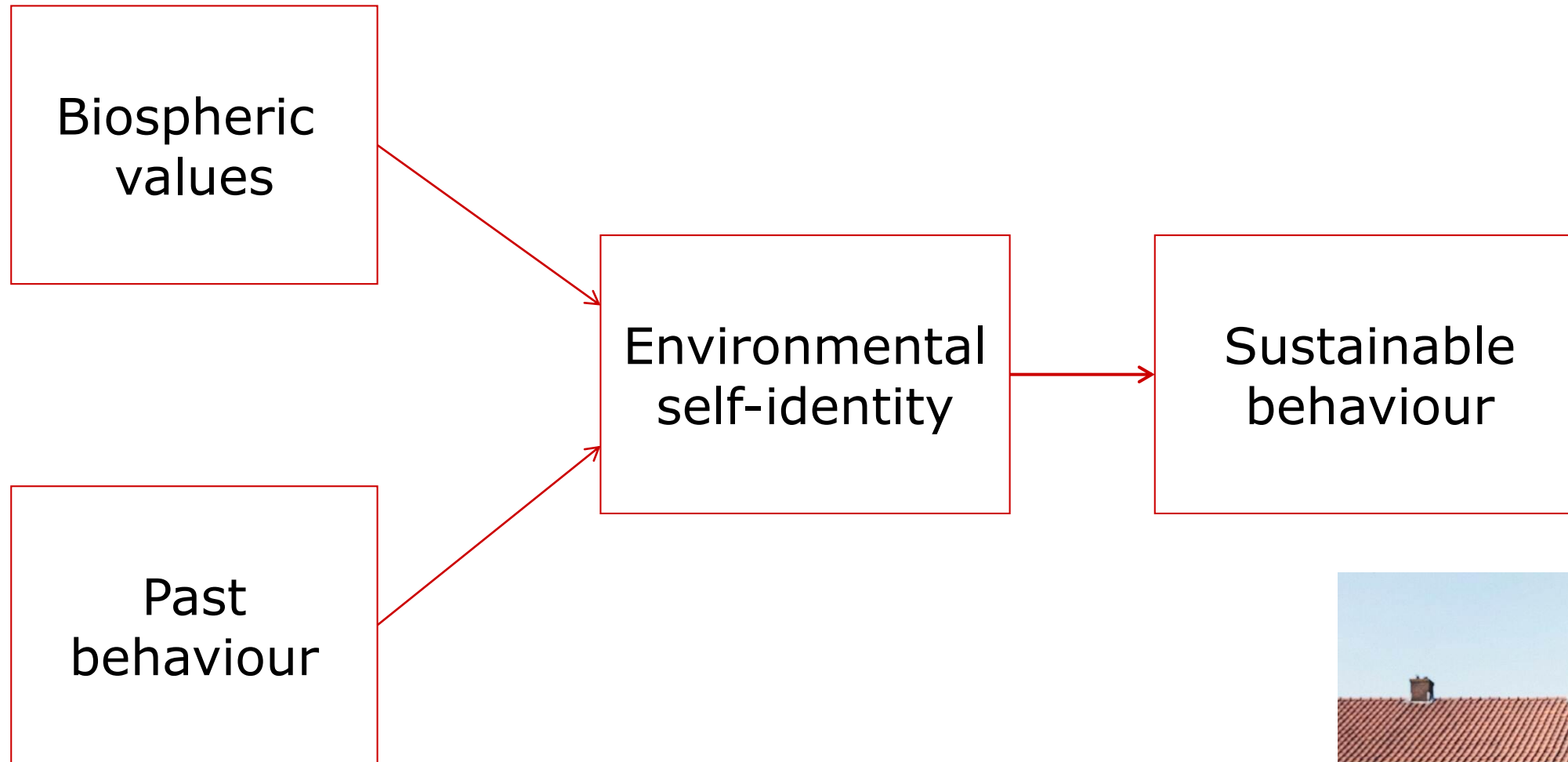
- > Acting sustainably feels good because it is meaningful
 - Particularly when voluntary and strong biospheric values
- > Positive self signal
- > Encourages pro-environmental behaviour



Warm glow

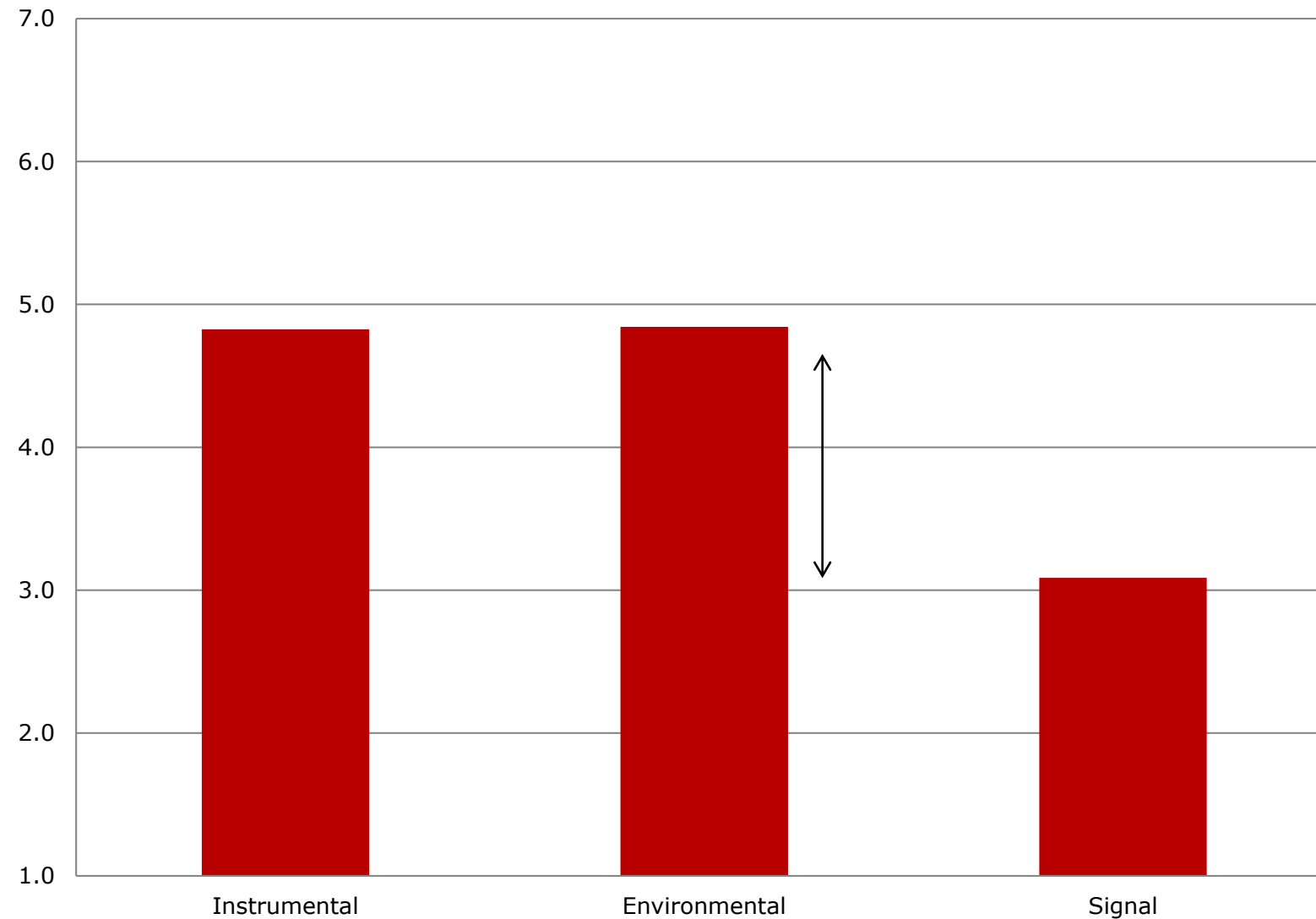


Environmental self-identity



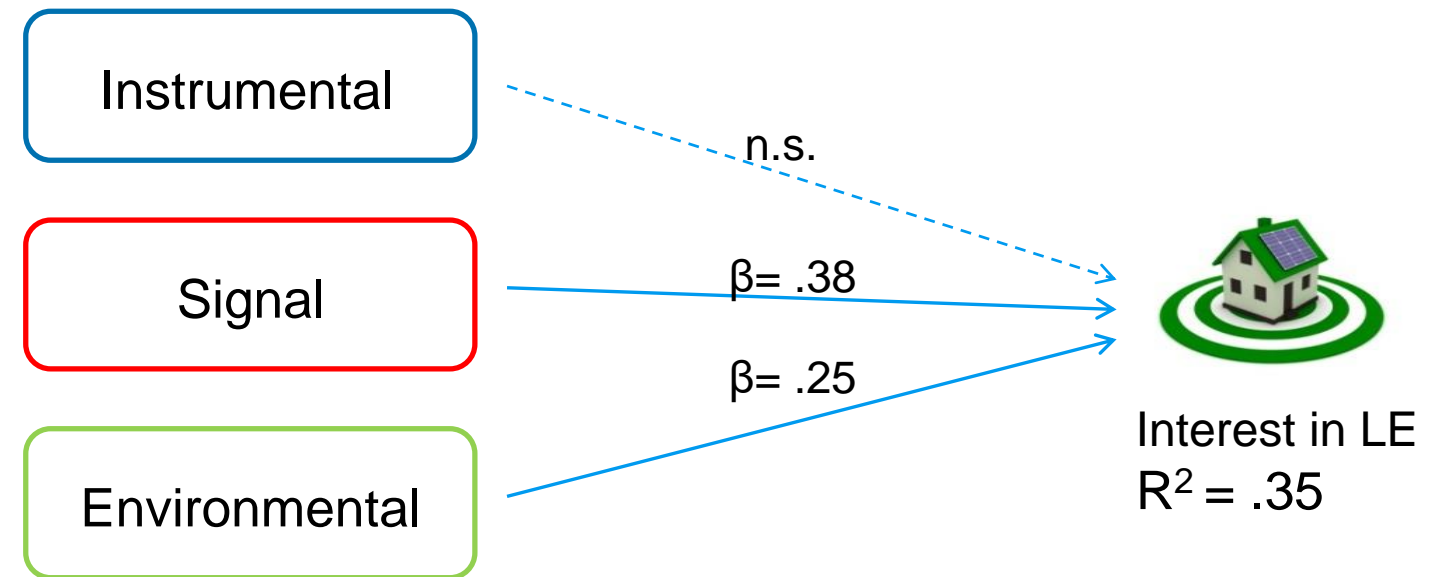
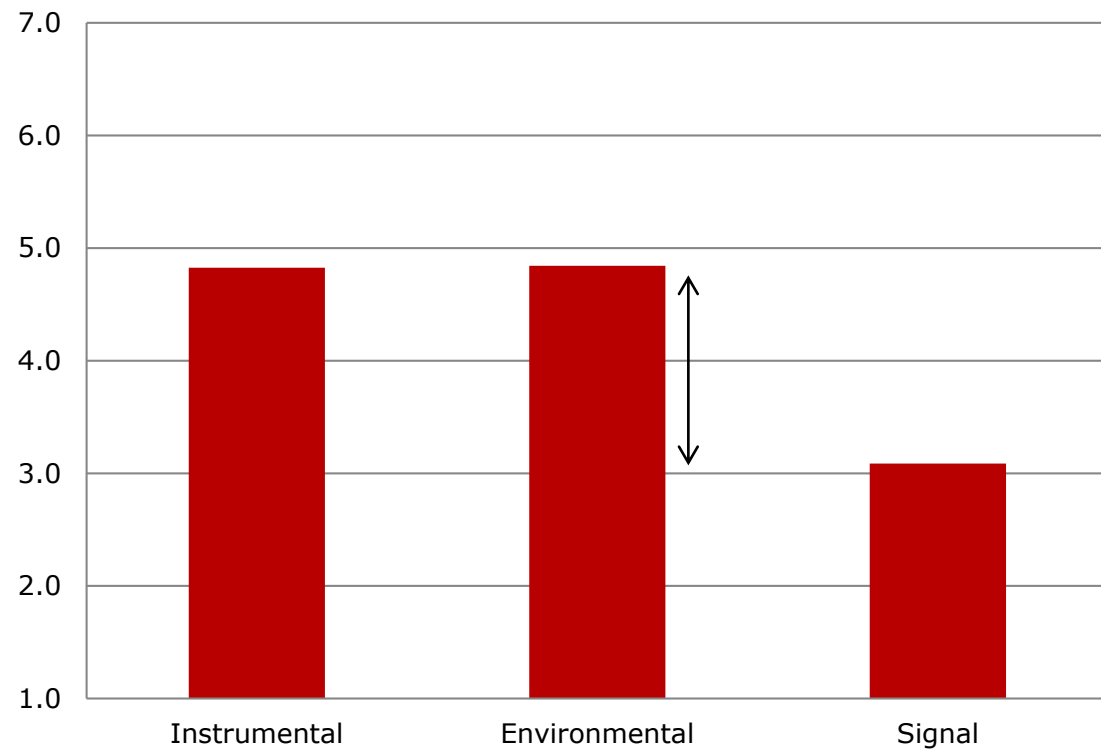
Symbolic value

Importance ratings



Symbolic value

Importance ratings



Involvement in community energy initiatives



Motives to be engaged in a community energy initiative



Corporate Environmental Sustainability

More sustainable energy behaviour:

- > when employees strongly endorse biospheric values
- > when they believe their organisation is committed to CER
- > CER particularly encourages sustainable energy behaviour when employees do not strongly endorse biospheric values



Norm (dis)respect cues



Graffiti versus no graffiti
Flyer at handlebar of bicycles
How many people litter the flyer?



No graffiti (N= 77)

33%

Graffiti (N=77):

69%





Clean environment
Picking up soda can
Sweeping

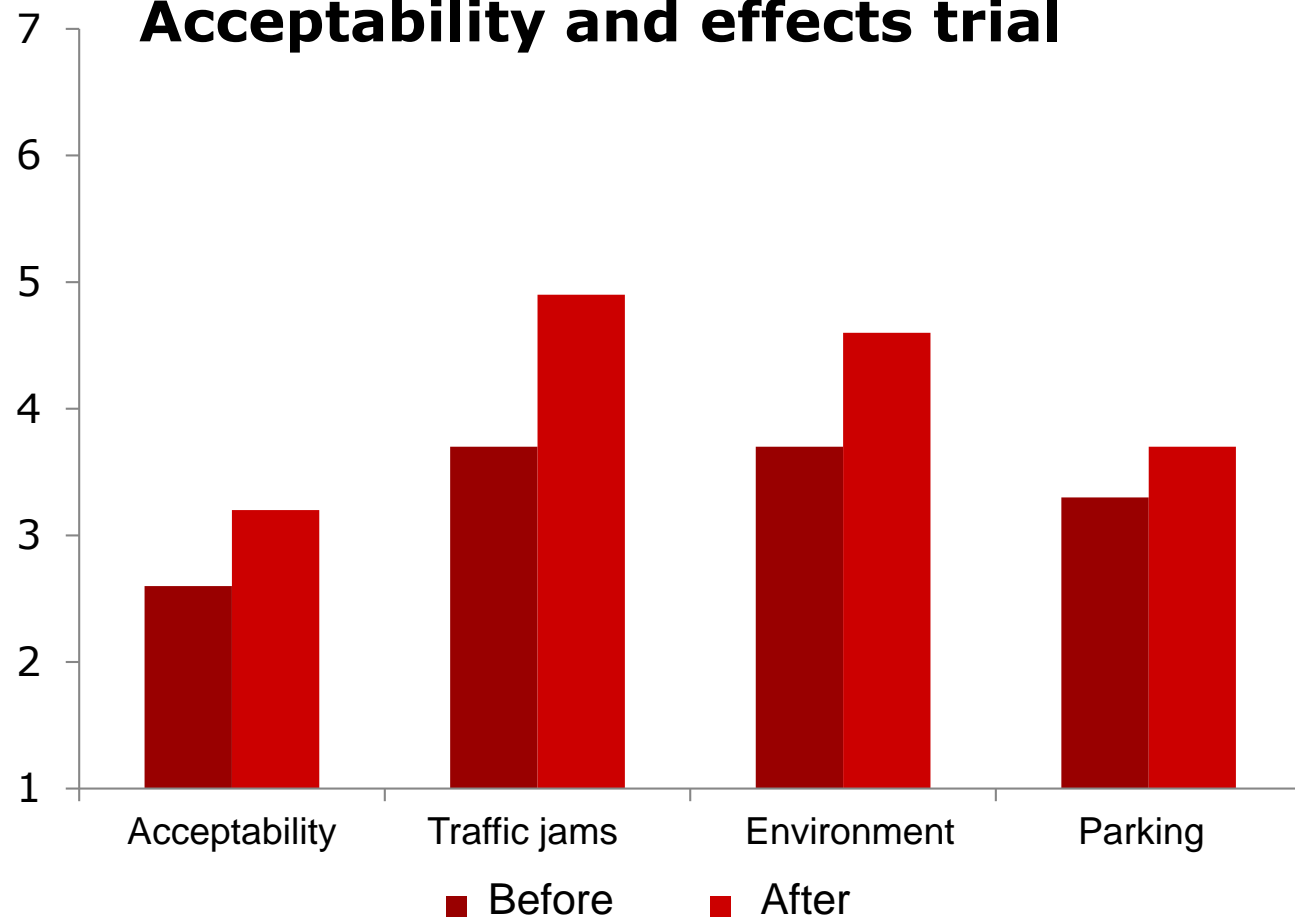
40%
64%
82%

Factors influencing public acceptability

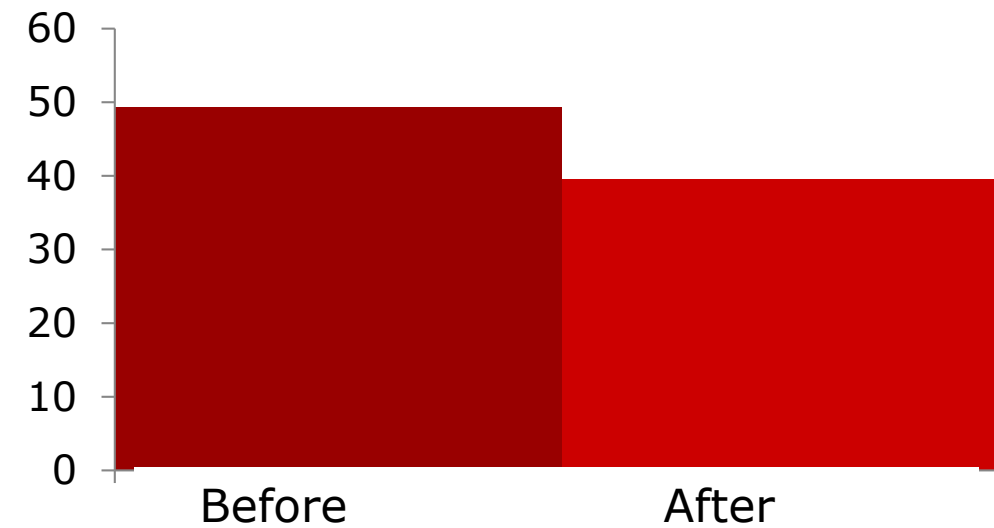


Effective trials

Acceptability and effects trial



Additional costs per week (Swedish krona)



Conclusions

- › Multiple motivations affect sustainable behaviour
- › Intrinsic motivation is a solid base for consistent sustainable behaviour
- › Create context that activates and supports biospheric values and offers co-benefits

Thank you!
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