

Can tourism businesses operate in more environmentally sustainable ways and save money without undermining guest satisfaction?

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The Low Harm Hedonism Initiative https://business.uq.edu.au/research/low-harm-hedonism

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"We are sleepwalking to climate catastrophe"

UN Secretary-General António Guterres











Last 9 Years Warmest on Record Global Temperature Anomaly (°C compared to the 1951-1980 average) 1.00 -2022 0.89°C 0.75 -0.50 0.25 0.00 -0.25 -0.50] 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 1890 1880 My My kids mom was born born were born

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"We are on a highway to climate hell with our foot still on the accelerator"

UN Secretary-General António Guterres

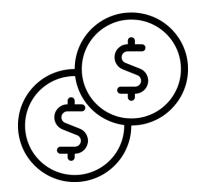






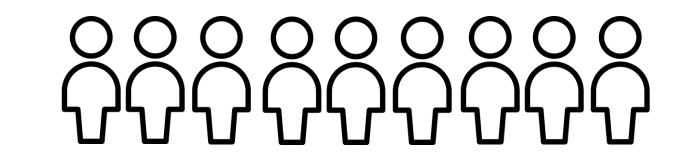


The tourism industry ...



10% of GDP

1 in 10 jobs







The tourism industry ...



8-10% of global CO_2 emissions, increasing by 3% annually



300 litres per guest per night



35 million tons of solid waste annually

UNWTO (2009) From Davos to Copenhagen and beyond: advancing tourism's response to climate change. United Nations World Tourism Organisation. Lenzen, Sun, Faturay, Ting, Geschke & Malik (2018) The carbon footprint of global tourism. *Nature Climate Change*, 8(6), 522-528. UNEP & WTO (2012) Tourism in the green economy – background report. Madrid: UNWTO.



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INTERGOVERNMENTAL PANEL ON CLIMATE CHARGE

Climate Change 2022 Mitigation of Climate Change



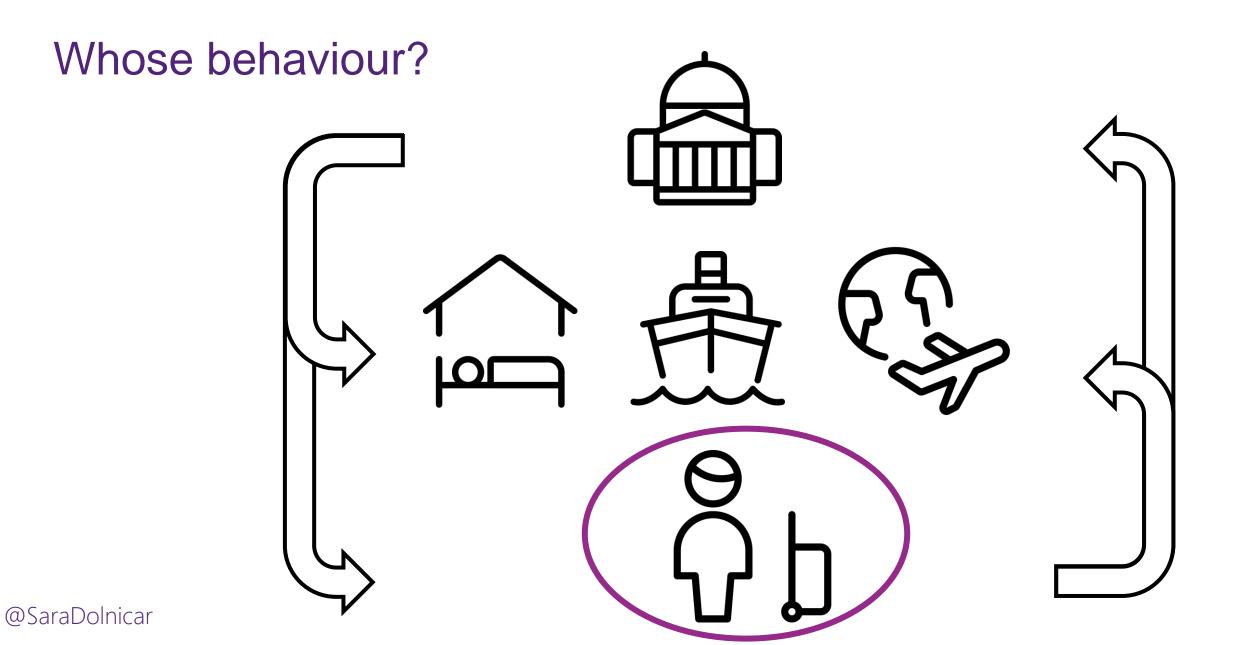
Working Group III contribution to the Sixth Assessment Report of the provernmental Panel on Climate Change



"Changes to behaviour can result in a 40-70% reduction in greenhouse gas emissions by 2050"

> IPCC 2022







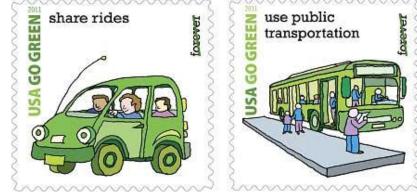
Assuming information \rightarrow attitudes \rightarrow behaviour





Water Villarity

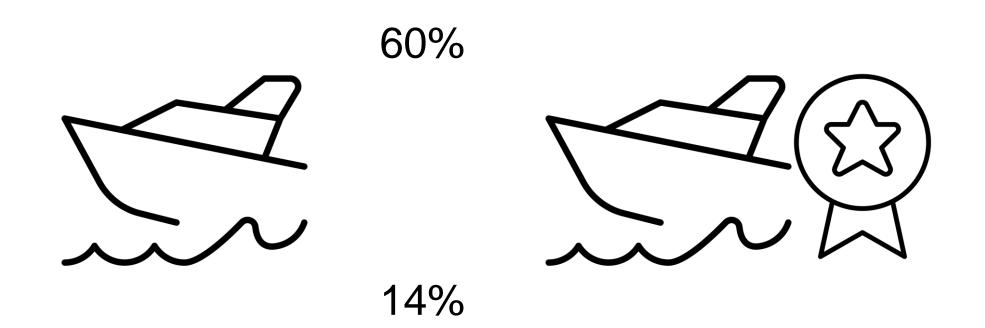








But does that approach work?





Even environmental volunteers find excuses



Annals of Tourism Research 48: 76-95



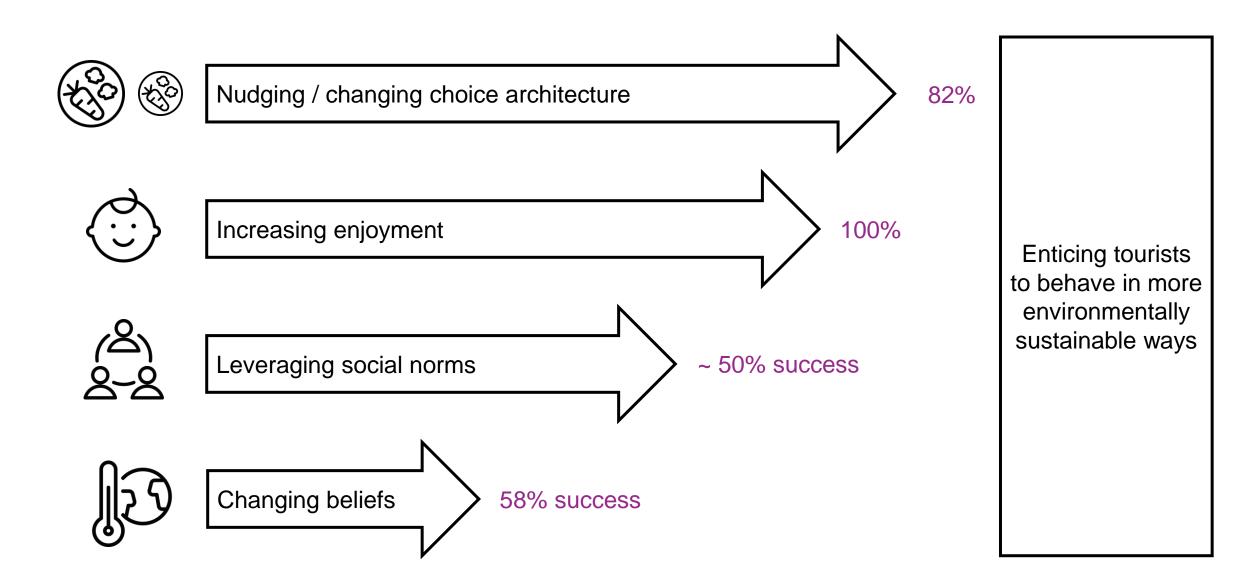
Many behaviours we just don't think about





Thaler & Sunstein (1999) Nudge: Improving decisions about health, wealth, and happiness. New Haven, CT Yales University Press.

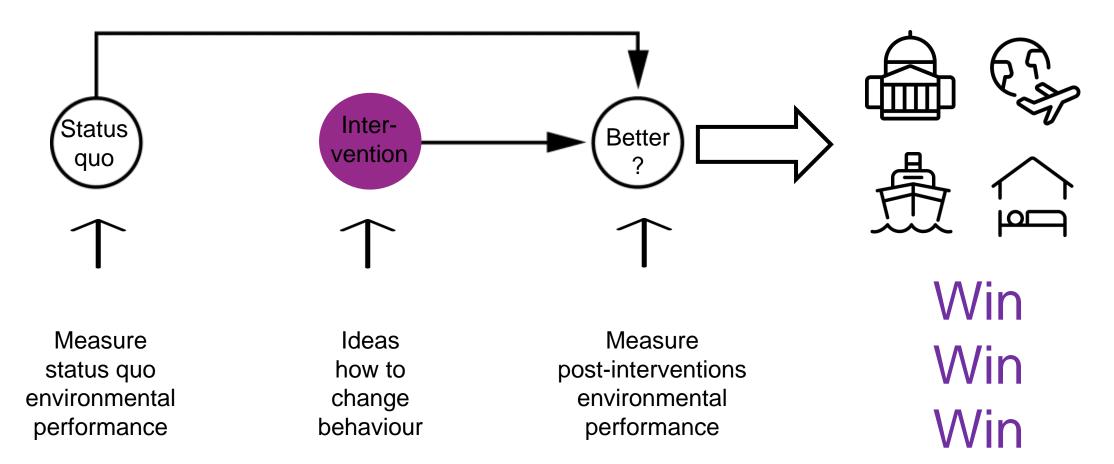




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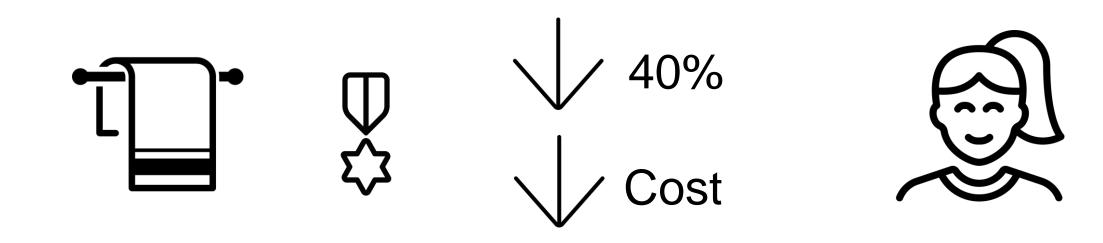
We need to develop effective practical measures



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Increasing towel reuse

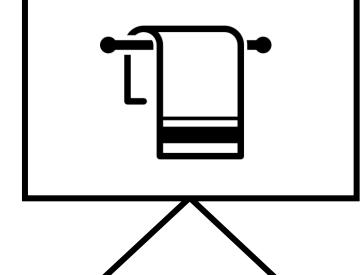






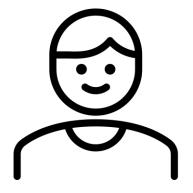
Increasing towel reuse

The majority of guests in <u>this</u> room reuse their towels



44% (reuse)

ost

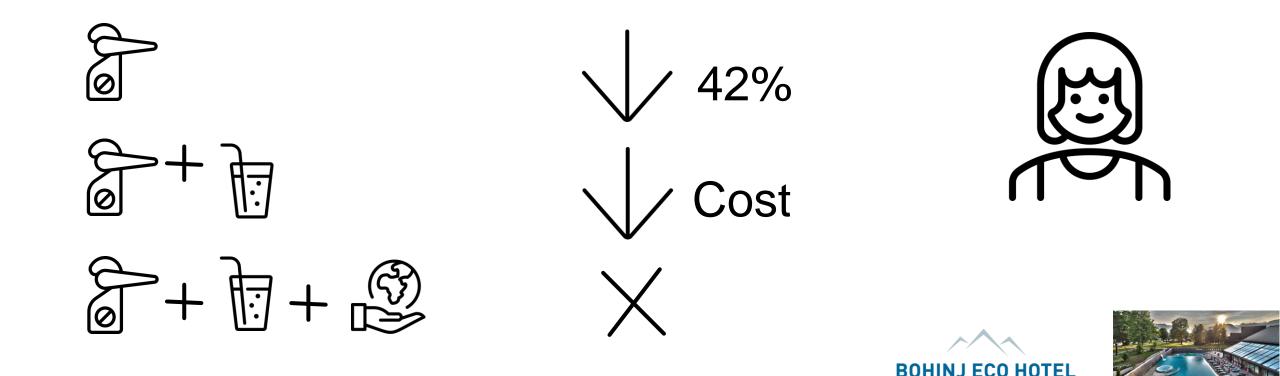


Goldstein, Cialdini & Griskevicius (2008) A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, 35(3), 472-482.





Reducing room cleaning

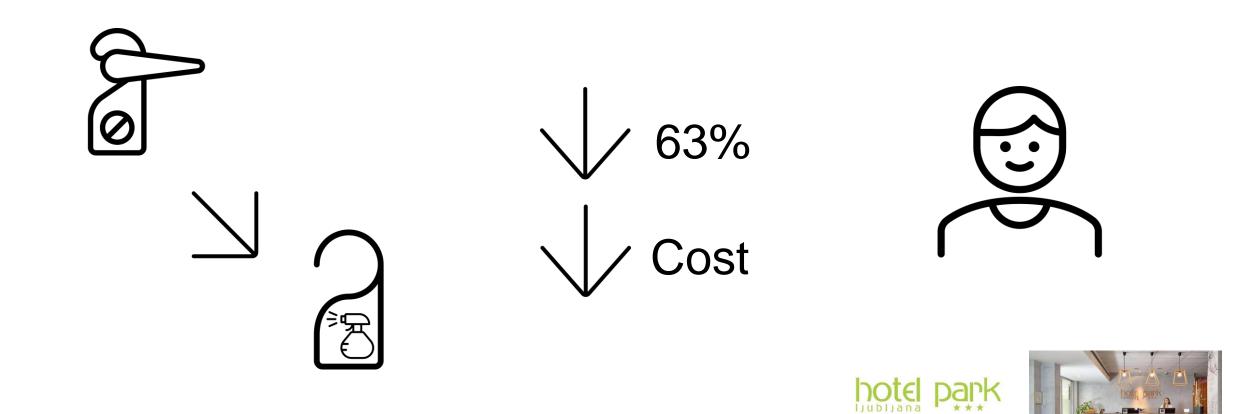


Watch video: https://youtu.be/8-GTek-Rwtg behave r

Dolnicar, Kneževič Cvelbar & Grün (2010) A sharing-based approach to enticing tourists to behave more environmentally friendly. *Journal of Travel Research*, 58(2): 241-252.



Reducing room cleaning



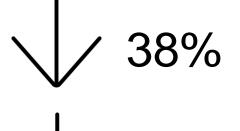
Watch video: https://youtu.be/tpX0spjpE8M

Dolnicar, Kneževič Cvelbar & Grün (2019) "To clean or not to clean?" Reducing daily routine hotel room cleaning by letting tourists answer this question for themselves. *Journal of Travel Research*, 0047287519879779.

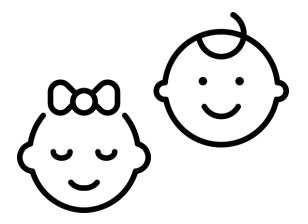


Reducing plate waste

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Cost



Hoteli Bernardin RESORTS & CONVENTION CENTER



Dolnicar, Juvan & Grün (2020) Reducing the plate waste of families at hotel buffets–A quasi-experimental field study. *Tourism Management*, 80, 104103.

Watch video: https://youtu.be/ve9rMHhiVhl

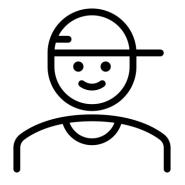


Reducing plate waste

Welcome back! Again! And again! Visit our buffet many times. That's better than taking a lot once.

21%

Cost

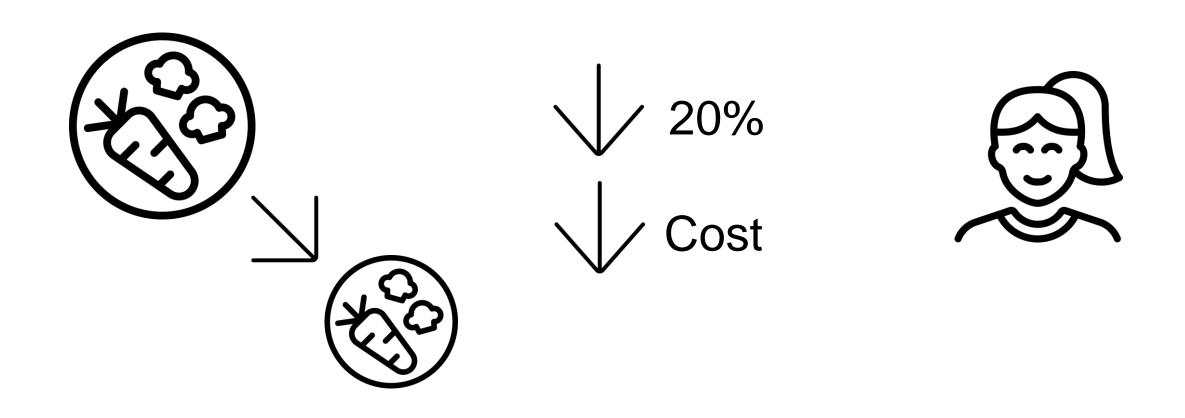


Kallbekken & Sælen (2013) Nudging' hotel guests to reduce food waste as a win–win environmental measure. *Economics Letters*, 119(3), 325–327.





Reducing plate waste

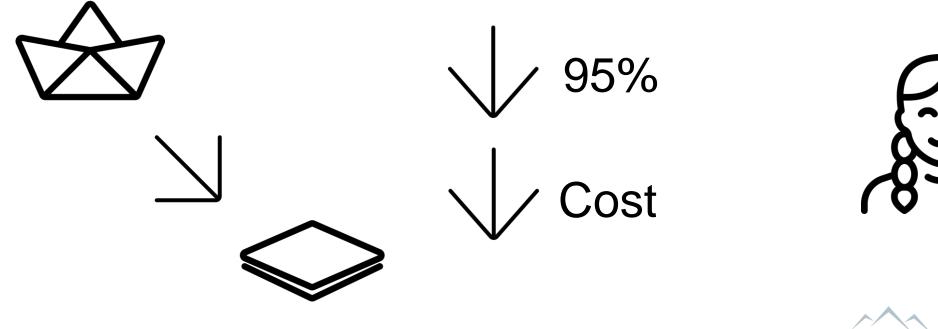


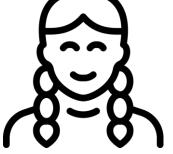


Kallbekken & Sælen (2013) Nudging' hotel guests to reduce food waste as a win–win environmental measure. *Economics Letters*, 119(3), 325–327.



Reducing the use of cotton serviettes







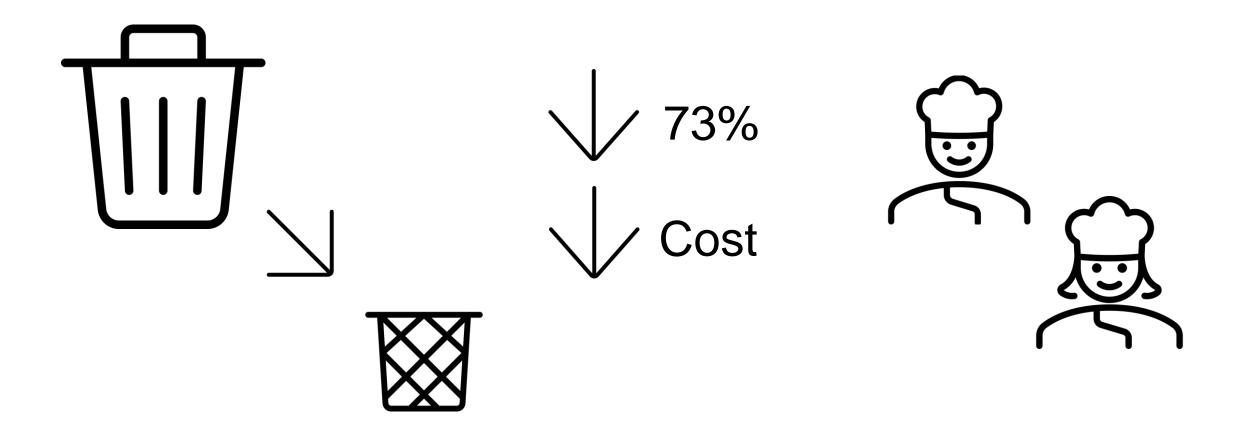


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Dolnicar, Kneževič Cvelbar, Grün (2019) Changing service settings for the environment – how to reduce negative environmental impacts without sacrificing tourist satisfaction. *Annals of Tourism Research*, 76:301–304.



Reducing food preparation waste





Chawla, Lugosi & Hawkins (2020) Evaluating materiality in food waste reduction interventions. *Annals of Tourism Research Empirical Insights*, 1(1), 100002.



Slow progress



Labour intensive



Snail speed

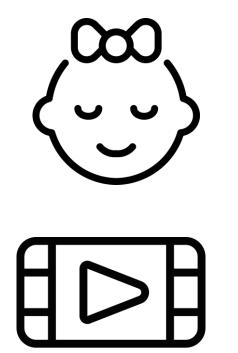




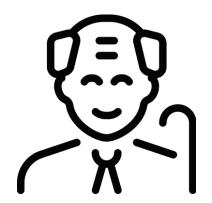
Random



Increasing booking of low-CO₂ holidays



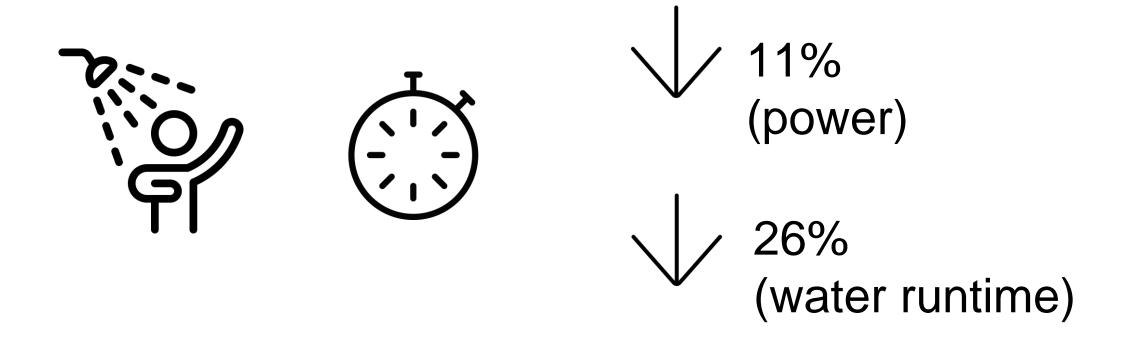




Araña & León (2016) Are tourists animal spirits? Evidence from a field experiment exploring the use of nonmarket based interventions advocating sustainable tourism. *Journal of Sustainable Tourism*, 24(3), 430-445.



Reducing (hot) water use in showers



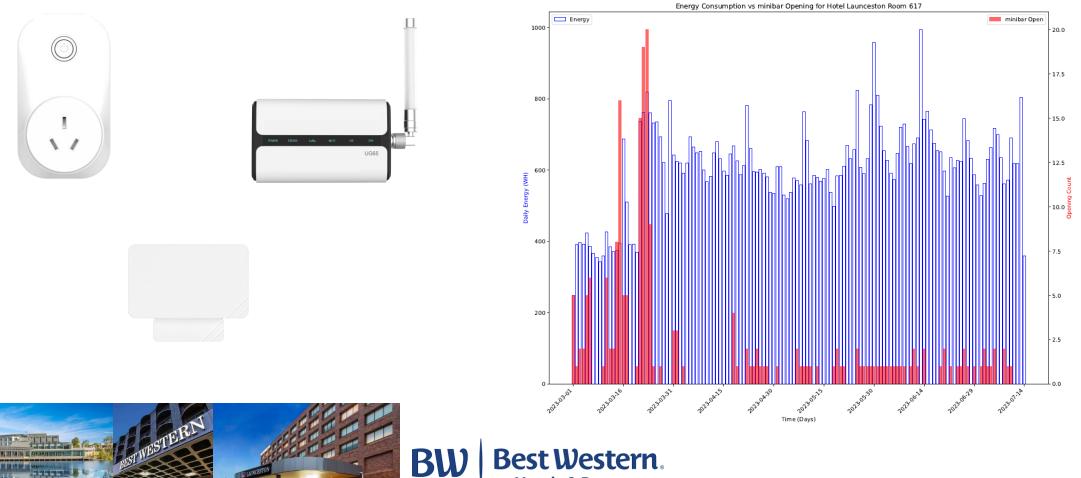
Tiefenbeck, Wörner, Schöb, Fleisch & Staake (2019) Real-time feedback promotes energy conservation in the absence of volunteer selection bias and monetary incentives. *Nature Energy*, 4(1), 35-41.

Pereira-Doel, Font, Wyles & Pereira-Moliner (2024) Reducing shower duration in tourist accommodations. Journal of Travel Research, 00472875241245045.





Gain insights to inform policy decisions

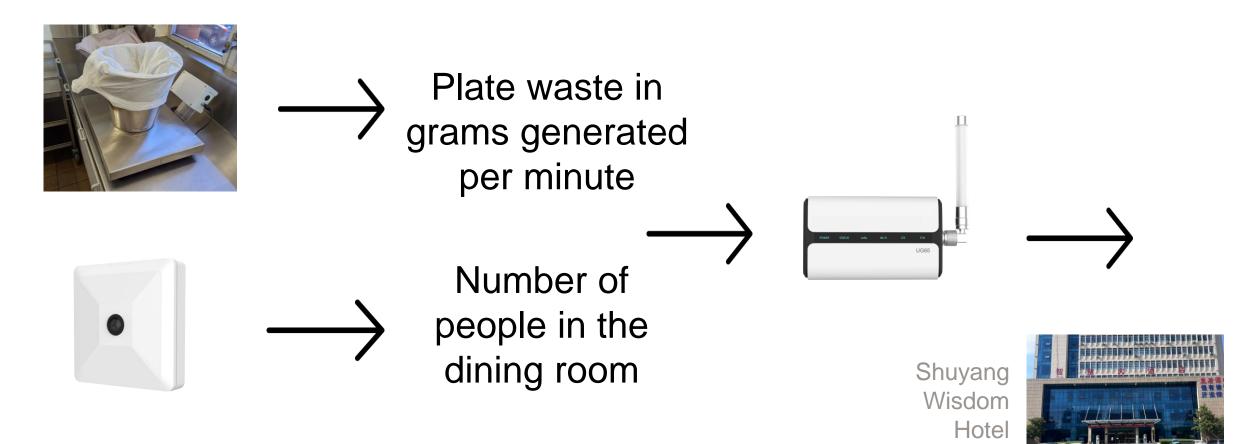




Best Western. **Hotels & Resorts**



Test ways to reduce emissions (and save money)



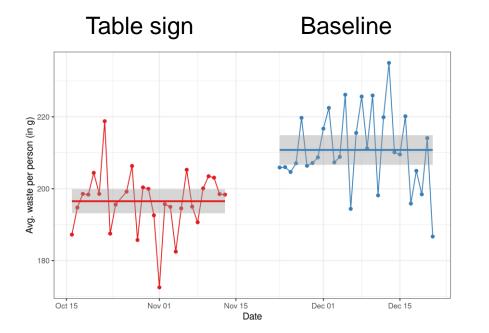
Dolnicar, Li, Gray, Portmann & Grün (2022) Monitoring environmental performance in tourism, DOI 10.31235/osf.io/5yprn.





Test ways to reduce emissions (and save money)





6.8% reduction

Shuyang Wisdom Hotel

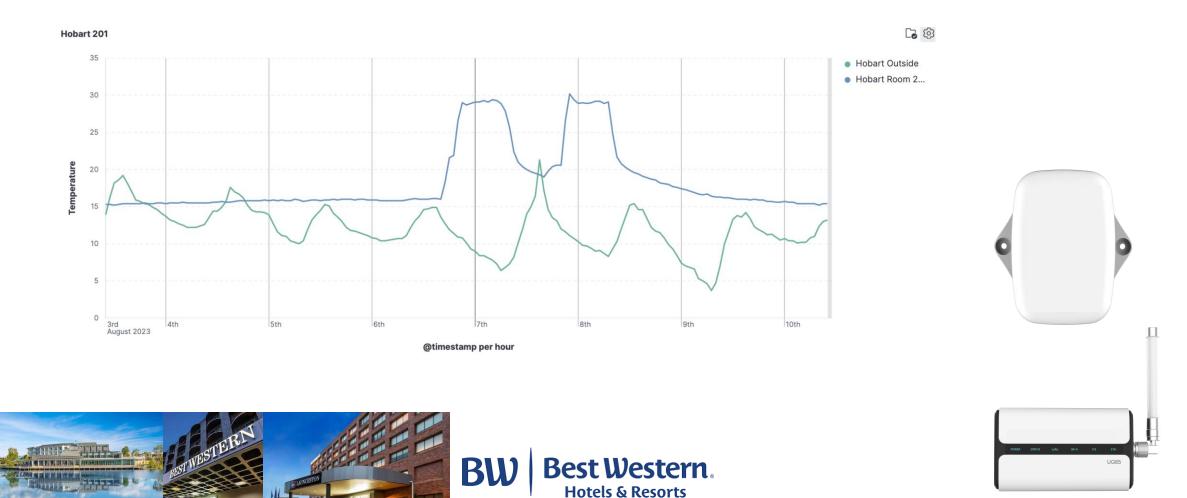


Measurement system: Dolnicar, Li, Gray, Portmann & Grün (2022) Monitoring environmental performance in tourism, DOI 10.31235/osf.io/5yprn.





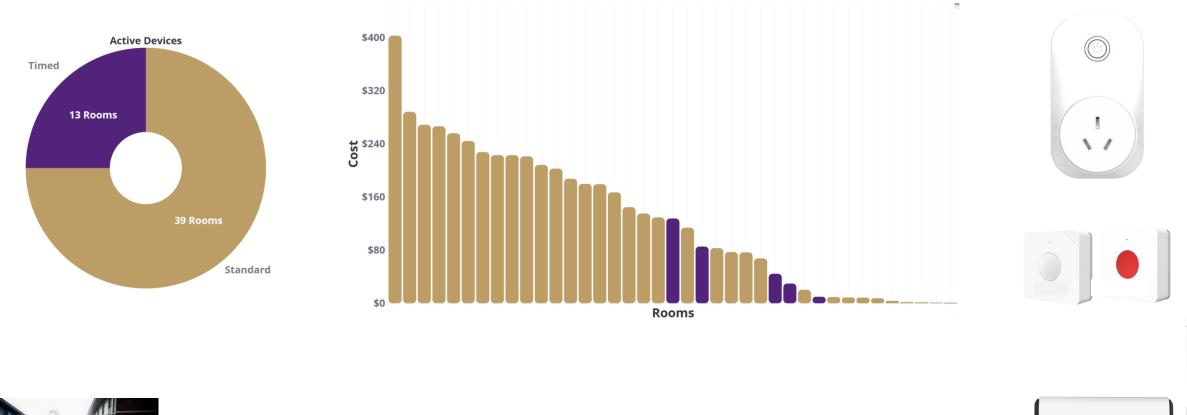
Monitoring development over time and then ...





UG65

... change behaviour





60% reduction



Conclusions

Sustainability does not always cost money / reduce guest satisfaction It can be a win-win-win

Research-industry collaboration needed (field experiments)

Technology needed (large scale testing)

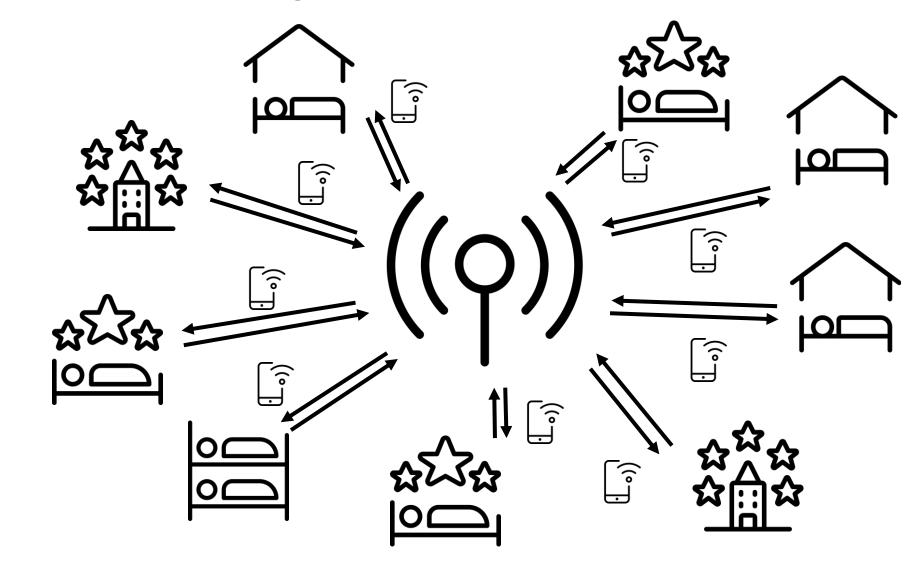
Legislation optimal – for speed

It is urgent, we don't have another 30 years



Be at the frontline of testing new approaches

Join the Environmental Behaviour Change Lab (limited to 15 hotels)



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Thank you for your attention

Professor Sara Dolnicar Tourism | UQ Business School The Low Harm Hedonism Initiative https://business.uq.edu.au/research/low-harm-hedonism s.dolnicar@uq.edu.au



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