MONASH NET ZERO BEHAVIOUR PRIORITISATION

REPORTS & PAPERS THAT INCLUDE NET ZERO BEHAVIOURS

This document contains the reports and papers that were used to generate a long list of behaviours relevant to accelerating the transition to net zero at university campus precincts. These reports and papers were found through a systematic search and review of scholarly research, international reports & strategies, and Monash University-relevant reports. You can find the PDFs of the reports and papers (excluding the confidential internal reports) in a shared folder.

For more information, read the project report, <u>Behaviour change to accelerate Net Zero transitions at Monash University</u>, or contact project lead Dr Alexander Saeri (<u>alexander.saeri@monash.edu</u>).

This document may be useful for:

- Identifying resources that may provide ideas for activities / interventions to accelerate transitions to net zero
- Conducting a systematic review of papers and reports relevant to net zero transitions at university

LIST OF REPORTS & PAPERS

International reports and strategies

International reports and strategies were found by searching relevant websites and databases (e.g., European Environment Agency, OECD, Green University Networks, International Sustainable Campus Network, C40 Cities).

Title	Authors (year)
A Behavioural Lens on Transportation Systems: The Psychology of Commuter Behaviour and Transportation Choices	Ly and colleagues (2017)
Five impactful actions cities can take to reduce building energy demand	C40 Cities Climate Leadership Group (2019)
How to drive electric vehicle uptake in your city	C40 Cities Climate Leadership Group (2021)
How to drive a modal shift from private vehicles to public transport, walking and cycling	C40 Cities Climate Leadership Group (2021)
The Playbook for Zero Emissions Mobility: Latin America and the Caribbean	C40 Cities Climate Leadership Group and colleagues (2021)
How to achieve a walking and cycling transformation in your city	C40 Cities Climate Leadership Group (2021)
2013 WEF-ISCN Report: Signature Projects	International Sustainable Campus Network (2013)
2014 WEF-ISCN Report: Best Practice in Campus Sustainability	International Sustainable Campus

	Network (2014)
2015 WEF-ISCN Report: Developing Skills for Future Leaders	International Sustainable Campus Network (2015)
2016 WEF-ISCN Report: Demonstrating Sustainable Development in Higher Education	International Sustainable Campus Network (2016)
2017 WEF-ISCN Report: Educating for Sustainability	International Sustainable Campus Network (2017)
2018 WEF-ISCN Report: Educating with Purpose	International Sustainable Campus Network (2018)
Cities, Climate Change and Multilevel Governance	Corfee-Morlot and colleagues (2009)
Greening Universities toolkit	Osmond and colleagues (2013)
Greening Universities toolkit V2.0	Dave and colleagues (2014)
The Little Book of Green Nudges	United Nations Environment Programme and GRIDArendal (2020)

Monash-relevant reports

The following are internal and public Monash reports on net zero (e.g., ClimateWorks, ENGIE reports, Net Zero Initiative reports). The non-linked reports are internal to Monash University or ENGIE; please contact us if you wish to access these.

Title	Authors (year)
Behaviour in Microgrids: Stakeholder Dialogue Summary and Impact-Likelihood Matrix	Klemm and colleagues (2021)
Identifying and targeting human behaviour in Microgrids. Literature and Practice Review	Klemm and colleagues (2020)
Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions Australia	Climateworks Australia (2020)
Monash Net Zero Initiative	Monash University (2020)
Net Zero Transport Strategy: Roadmap of Initiatives	Monash University (2021)

Peer reviewed systematic reviews

These systematic reviews of net zero and emissions reduction behaviours were found through searching the SCOPUS database.

Title	Authors (year)
Agent-Based Modelling of Urban District Energy System Decarbonisation—A Systematic Literature Review	Akhatova and colleagues (2022)
Organisational travel plans for improving health (Review)	Hosking and colleagues (2010)
Multilevel barrier and driver analysis to improve sustainability implementation strategies: Towards sustainable operations in institutions of higher education	Hueske and Guenther (2020)
Carbon footprint in Higher Education Institutions: a literature review and prospects for future research	Valls-Val and Bovea (2021)

REFERENCES

Access a shared folder of reports that includes most of the resources in this list

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- C40 Cities. (2021). The Playbook for Zero Emissions Mobility: Latin America and the Caribbean. C40 Cities. https://c40.my.salesforce.com/sfc/p/#36000001Enhz/a/1Q000000YPxt/.RA0vmeuulzHf0eX27ztEiDb 1MbfQaAOtmBeC.fn828
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- Klemm, C., Tull, F., & Smith, L. (2021a). *Behaviour in Microgrids: Stakeholder Dialogue Summary and Impact-Likelihood Matrix*. BehaviourWorks Australia, Monash University.

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- United Nations Environment Programme, & GRID-Arendal. (2020). *The Little Book of Green Nudges: 40 nudges to spark sustainable behaviour on campus.* stg-wedocs.unep.org. https://stg-wedocs.unep.org/handle/20.500.11822/33578
- Valls-Val, K., & Bovea, M. D. (2021). Carbon footprint in Higher Education Institutions: a literature review and prospects for future research. *Clean Technologies and Environmental Policy*, 23(9), 2523–2542. https://doi.org/10.1007/s10098-021-02180-2

MORE INFORMATION

About the project

A net zero university precinct is one in which the buildings, transportation, and other infrastructure do not generate more greenhouse gas emissions than the amount that is removed from the atmosphere. In order to achieve net zero, universities must adopt new technologies and behaviours to reduce emissions.

Monash University, Australia, committed to net zero emissions (scope 1 and 2) by 2030. The <u>Monash Net Zero Initiative</u> seeks to realise that commitment through deep decarbonisation including technology development & deployment and behaviour change.

However, at Monash University and in other university campuses, as well as university-scale urban districts and precincts, it is not clear "who needs to do what differently" to get to net zero. It's also not clear which behaviours are the most important to focus on in order to achieve net zero. This research project identifies and prioritises net zero behaviours on university campuses. The results of this research will help universities and other university-scale urban districts and precincts to focus their efforts on the most important behaviours in order to achieve net zero.

Primary project outputs

- Read the project report, Behaviour change to accelerate Net Zero transitions at Monash University, which describes why we conducted this research project, what we found, and our recommendations
- View the list of behaviours used in the project to understand and prioritise actions to accelerate net zero transitions at university campus precincts
- Access the interactive prioritisation matrix, which visualises the impact, ease, and current
 participation for each net zero behaviour based on surveys of Monash staff and students, and
 experts in net zero

Other project outputs

- Read the preregistered research protocol that describes our search strategy and selection process leading to this long list of behaviours
- <u>View reports and articles</u> identified as relevant to net zero behaviours on campuses and urban districts / precincts
- Explore the full list of every net zero behaviour (n ~ 239) identified through the evidence review, their source report / article, and how they were clustered into a list used in this project

- <u>Download the survey materials</u> to replicate and adapt our work in your context <u>Access the anonymised aggregate survey data</u> and data dictionary to conduct secondary analysis or modelling of prioritisation results in your context