



Template for non-Party stakeholders' inputs for the Talanoa Dialogue

Question 3 - How do we get there?

This template is meant to guide non-Party stakeholders (organization(s), coalition(s), initiative(s) and/or sector(s) etc.) in providing inputs that are relevant and impactful to the Talanoa Dialogue process. Using such the template is not mandatory, however, the High-level Champions encourage non-Party stakeholders to use such a structure to facilitate capturing and highlighting the key messages across the three questions.

How do we get there?

Q1: Ways in which the UN Climate Change process can help you achieve your vision and goals, and how your actions can help in expediting sustainable transitions to climate neutral societies [Maximum 300 words]

Knowledge Sharing and Transparency are essential if we stand a chance to tackle climate change. The UN Climate Change process through the Talanoa dialogue provides an online platform to share the stories and obtain better visibility of the efforts undertaken on the global scale. One step further would be for this process to enable the connection of the various players around the globe to promote effective cooperation and avoid duplication of efforts.

The <u>Net Zero Initiative</u>, UN 2018 Momentum for Change award winner, has committed Monash University, Australia's largest university, to reaching net zero emissions by 2030 for all four Australian campuses.

The strategy which ClimateWorks Australia helped develop for Monash's Net Zero Initiative is centred around four pillars of decarbonisation: ambitious energy efficiency, renewable energy, electrification / fuel switching and offsetting residual emissions. Strategies based on these pillars can be tailored to provide cost-effective pathways to net zero emissions across organisations, communities and governments.

Through innovation, and partnerships, Monash has embarked on a deep decarbonisation journey for its campuses while integrating research and teaching into the process. Monash's Net Zero Initiative is designed to make the university's Australian campuses "living laboratories".

A strong emphasis is placed on transforming Monash's campuses into smart cities and creating models that can be replicated well beyond the campus boundaries. For instance, Monash is building a Microgrid on its largest campus to demonstrate how a 100% renewable powered Net Zero city could operate reliably, and the value it could provide to customers and the broader energy network.

By providing demonstration models for future Smart Energy Cities, while partnering with industry and government and sharing knowledge, it is ambition of the Net Zero Initiative to help expedite sustainable transitions to climate neutral societies.





Q2: Concrete solutions that have been

realized while implementing your commitments, including lessons learnt from success stories and challenges, and case studies that are in line with the 1.5/2 degrees' goal and can support the Parties in achieving their NDC goals, enable higher ambition and inspire engagement of other non-

state actors [Maximum 300 words]

Since the Net Zero announcement in October 2017, concrete sustainable actions undertaken by Monash include:

- Started implementing its energy efficiency program including installing 11,000 LED lighting upgrades, mechanical plant renewal and optimisation.
- Installed more than 4,000 solar panels, bringing its existing rooftop solar capacity to nearly 2MW.
- <u>Signed a Power Purchase Agreement</u> with a wind farm to help meet its 100% renewable power target.
- Commenced roll-out of the Thermal Precinct electrification strategy.
- Installed a state-of-the-art 1 MWh hybrid energy storage system.
- Commissioned new Electric Vehicle charging facilities.
- Gained funding from industry and government to develop a market-leading microgrid.

Lessons learned from the development and establishment stages include:

- *Motivation Effective transitions require to understand key drivers to align the business case to the organisations' priorities.*
- Change Management Executive buy-in was essential to drive the various components of the Net Zero Initiative at all levels of the organisation. Having influential champions from within but also at the top of the organisation is essential to deploy such programs.
- Engagement strategy The Net Zero announcement strategy helped consolidate internal and external engagement, strengthening existing partnerships and creating new opportunities. Planning for and celebrating short-term wins are a good way to gain momentum and encourage staff working on the ground.
- Innovative finance Beyond the reputational benefits, grounding the initiative in its financial implications, aligning finance to sustainability outcomes, constituted a key program enabler.

Monash became the first university in the world to raise funds by issuing a <u>Climate Bond</u>. This provides a mechanism to ensure that new buildings achieve high energy performance standards.

Industry and government funding anchor the initiative in today's relevant challenges, provide a mechanism to deliver on the promises, and enable knowledge sharing with the relevant stakeholders.

Q3: Collaboration models with other stakeholders and, in particular, between non-Party stakeholders, national governments and the UN Climate Change process that have been successful in helping you, or can help you, achieve your commitments [Maximum 300 words]

The ambition is for Monash campuses to become exemplars of environmental practice, integrating education, research and industry partnerships with the built environment.





Across the various components of the Net Zero Initiative, Monash and ClimateWorks Australia are working with Industry to ensure best-practice, innovation and knowledge sharing remain core focus points of the Initiative.

For instance, on the building optimisation program front, a partnership with a smart building technology provider will ensure high comfort and performance levels in the buildings and help learn from the occupants' behaviour.

The Net Zero Initiative has recently secured \$3.5m of federal and state government funding for the <u>Smart Energy City</u> and <u>Microgrid Electricity Market Operator</u> projects, designed to bring solutions to today's energy industry challenges.

In collaboration with a range of industry partners, the 100% renewable powered Microgrid is designed to serve as an energy ecosystem, to enable the testing of new technologies, to foster the development of new business models, but also understand the regulatory changes to accelerate the fair transition to a 100% renewable powered world.

Monash's Grid Innovation Hub brings academic and industry leaders to define challenges associated with Australia's energy transformation and implement industry research and training programs. Transforming its infrastructure and utilising its own campuses as living laboratories has enabled Monash to attract industry partners and funding to test various energy solutions. This in turn enables Monash researchers and students to tackle the pressing issues of today.

Monash and ClimateWorks Australia are working with industry and government to communicate the lessons learned from the Net Zero Initiative, and to encourage other entities to undertake similar initiatives. The Net Zero Initiative seeks to inspire future leaders and communities to learn, research and collaborate on what it takes to power a sustainable world.

Q4: Opportunities to further scale up action and means to address barriers that can enable even further action by non-Party stakeholders based on the actions you have taken to implement your commitments. ("We've made progress and have made new commitments as described above. This is what I need from national governments, other non-Party stakeholders and the UN Climate Change process to take even further action...") [Maximum 200 words for each item below]:

a/ Policy levers

With advice from ClimateWorks Australia, the Victorian Government's Climate Change Act 2017 established a long-term target of net zero greenhouse gas emissions by 2050.

The strategy which ClimateWorks Australia helped develop for the Net Zero Initiative is centred around four pillars of decarbonisation: energy efficiency, renewable energy, electrification and offsetting residual emissions. Strategies based on these pillars can be tailored to provide cost-effective pathways to net zero emissions across organisations, communities and governments.

ClimateWorks is working with stakeholders in Indonesia, the Philippines and the Pacific to develop long term, low emissions pathways. The <u>Strategic Mitigation</u>, <u>Adaptation and Resilience Tool</u> facilitates this by enabling the quick identification of synergies between mitigation and adaptation related plans and activities. In this way, planners and policy makers can identify where there are co-benefits to be realised and trade-offs that need to be considered or minimised in planning.





Additionally, the 100% renewable powered Microgrid under development at Monash provides an innovative solution that can be replicated more broadly. The Initiative is working with the Victorian state government to understand the regulatory and policy barriers that could prevent the deployment of Microgrids across the state from a business establishment perspective, and will make policy amendment recommendations.

• b/ Collaboration/cooperation opportunities

Monash is investigating the development of a zero emissions Precinct of the future, by translating our learnings from the Net Zero Initiative with the Victorian government and industry. This includes scaling of the Smart Energy City model, as well as working to provide connectivity and transport services compatible with a zero emissions future.

As a research and teaching institution, Monash is well placed to share the lessons learnt with industry, government and the wider community, but also educate the next generation of leaders on how to power a sustainable world, and assist in training the transitioning workforce.

Locally, Monash is assisting the community of Healesville to transition the town to net zero emissions.

ClimateWorks supports Fiji's Low Emissions Development Strategy. Drawing on the <u>Horizon to Horizon</u> guide, ClimateWorks has shadowed the Global Green Growth Institute and the Ministry of Finance's Climate Change Division.

Knowledge sharing and cooperation at local and global levels will be required to tackle climate change. The Talanoa dialogue provides a platform to share the stories and obtain better visibility of the efforts undertaken on the global scale. Could this enable communication channels through its network to promote effective cooperation and avoid duplication of efforts?

• c/Lessons learned based on the experience and progress so far

- Identifying the drivers Effective transitions require to understand the key drivers to align the business case to the organisations' priorities.
- **Reputation** Appealing to the reputation of an organisation (especially if the organisation is customer facing) is an effective way to drive their commitment to climate action.
- Innovative finance Beyond the reputational benefits, grounding the initiative in its financial implications, aligning finance to sustainability outcomes, constitutes a key program enabler.
- Enabling infrastructure Behavioural change can be enabled by providing the infrastructure and tools that can support the desired change in behaviour.
- Change champions Executive buy-in was essential to drive the various components of the Net Zero Initiative at all levels of the organisation. Having influential champions from within but also at the top of the organisation is essential to deploy such programs.





- Maintaining momentum The Net Zero announcement strategy helped consolidate internal and external engagement, strengthening existing partnerships and creating new opportunities. Planning for and celebrating short-term wins are a good way to gain momentum and encourage staff working on the ground.
- Establishing key partnerships Strategic partners internally and externally are essential to connect various stakeholders, foster appropriate networks, be industry leading and convey overall program legitimacy.
- d/ Public and private financing models
 - University funding Monash has committed \$135m to become 'net zero emissions by 2030' across all four of its Australian campuses.
 - Climate Finance innovation Monash became the first university in the world to raise funds by issuing a Climate Bond, and has so far raised approximately \$285m through this mechanism.
 - **PPA model** Monash has entered a corporate purchase agreement (PPA) with Victoria's Murra Warra wind farm through a collaborative and innovative approach to procure 100% renewable power for all campuses. With this deal, Monash joins the Telstra-led consortium which includes ANZ, Coca-Cola Amatil and the University of Melbourne.
 - Co-funding from industry and government Monash is partnering with industry and government on market leading Microgrid projects designed to bring solutions to today's energy industry challenges. \$3.5m of federal and state government funding were secured for the Smart Energy City and Microgrid Electricity Market Operator projects, with a total value of approximately \$7.6m. Additionally, Monash attracted Research funding from the Grid Innovation Hub industry partners.
- Philanthropy ClimateWorks is a partnership between Monash University and the Myer Foundation. With the independence philanthropy provides and academic grounding, ClimateWorks has become an independent, credible advisor in Australia's transition to a prosperous low carbon future.
- e/ Impact on non-Party stakeholders if these actions by national level governments and the UN Climate Change process and other opportunities are implemented and how much further they could go

The key determinant of whether we achieve a 1.5 degree target or overshoot and stabilise temperature rise at 3 degrees, is how quickly and how ambitiously we act. UNFCCC parties must demonstrate more ambitious commitment to reducing emissions at a faster rate in line with Paris commitments.

Addressing climate change (both mitigation and adaptation) is also critical to the achievement of other sustainable development goals. For example, many developing countries have the opportunity to 'leapfrog' the fossil fuel technologies that are typically associated with economic development. A long-term net zero





pathway provides a clear roadmap to reducing emissions but can also integrate necessary institutional, economic, technological and social changes.

Individual companies, cities and state governments can learn from organisations and initiatives around the world, such as Monash University, ClimateWorks Australia and the Net Zero Initiative, to better develop and implement long term net zero emission strategies.