Contribution of universities to the Sustainable Development Goals (SDGs)

Institute for Sustainable Futures, University of Technology Sydney (ISF-UTS)

Summary of the submission:

- The SDGs provide an effective platform and opportunity to coalesce action from multiple actors (government, business, civil society) towards sustainable development, across Australia and in our region and globally.

- Action is required and will be of benefit to Australia. We are grappling with global issues of climate change, fragility and scarcity of natural resources, changes to geo-politics particularly in our region, migration and concerns for growing inequality. Australia’s efforts for sustainable development can be leveraged for trade and diplomacy and can contribute to peace, security and economic prosperity in our region.

- Universities, such as UTS are well placed to support the agenda of SDGs and to realize the outcomes of sustainable development through our core activities of research and education and broad reach and connection to the general public (especially through our students (domestically and also internationally)), links to industry and the private sector and government. Universities such as UTS are uniquely situated to foster change and innovation.

About ISF-UTS:

We are a university research institute that has been creating change towards sustainable futures by conducting independent project-based research for Australian and international clients since 1997.

Our researchers and professional staff come from varied backgrounds, including engineering, architecture, management, economics, science, the social sciences, international studies and political studies. Most have worked in both government and commercial environments, so we know how to deliver independent and practical solutions to suit the needs of a diverse range of clients.

We are small enough to offer our clients personalised service and large enough to offer a diversity of research skills.
Our unique postgraduate program nurtures and develops the brightest, most curious minds, giving them the skills to navigate the complex multidisciplinary environment of creating change towards sustainable futures.

The University of Technology Sydney (UTS) signed the University Commitment to the Sustainable Development Goals on 2 September 2016 demonstrating its support for the SDGs.

Response to selected terms of reference:

a. the understanding and awareness of the SDG across the Australian Government and in the wider Australian community;

There is a significant lack of awareness about the SDGs in the wider Australian community, universities such as UTS are well placed to engage the Australian public in a movement for sustainable development and transformational change. We have multiple pathways to influence change:

1. Teaching: UTS has more than 40,000 students and international students connected to more than 120 countries

2. Research: our researchers have expertise to drive practical solutions to real world problems and have the capacity to capitalise on multiple disciplines to create innovative change for the future

3. Engagement: our industry connections with business, government and civil society mean that we can connect new knowledge with practical agendas for change

Through these combined pathways universities are well placed to contribute to “Sustainable Development Goal 17, Target 16, which calls for us to “Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.”

Through these multiple pathways we can create awareness and commitment to act for the sustainable development goals. Examples of our research and contribution to innovative partnerships are noted below, these demonstrate the potential and opportunity for more action.

• Research in partnership for innovation

Research that contributes to the achievement of Goal 12 (Responsible consumption and production) includes the Wealth from Waste Cluster, a 3 year, $9 million international research program led by the Institute for Sustainable Futures (ISF),
University of Technology Sydney and CSIRO. The project also brought together Monash University, the University of Queensland, Swinburne University of Technology, Yale University to promote a circular economy agenda for the Australian metals industry, improving the sustainability of metal resource production and consumption.

ISF researchers have mapped the potential for urban mining of metals through recycling existing products, characterised viable technological approaches for e-waste recycling, examined innovative business models such as leasing and product longevity, and have identified key policy levers to support a circular economy for metals.

http://wealthfromwaste.net

- Research in partnership with industry

Research that contributes to Goal 7 (Affordable and clean energy), Networks Renewed will pioneer an innovative use of mass distributed solar and storage in Australia. With a total value of over $5 million, ISF-UTS is leading a partnership with with electricity network businesses Essential Energy in New South Wales (NSW) and United Energy in Victoria start-up company Reposit Power, solar technology provider SMA Australia, the Australian Photovoltaic Institute, and the NSW and Victorian Governments, to build on the knowledge generated from smaller trials and bring the idea of a truly smart electricity grid closer to a reality.


- Research in partnership with communities

Research that contributes to Goal 13 (Climate Action) The Adaptive Communities Node is led by ISF-UTS, with support from CSIRO. The focus is on research into how urban and rural communities can best adapt and respond to climate change and into ways in which the government can provide support to local communities to build resilience.

Through our research we are connecting with industries, communities and governments to consider how best to leverage and catalyze current best practice and innovation across multiple sectors and industries, necessary to scale-up change necessary to meet the SDG goals.


**Recommendation**: Governments at all levels to invest in research innovations and research partnerships. In order to meet the SDGs we need a 'step change' to move
‘business beyond usual’ and to create real awareness and commitment to SDGs across multiple sectors. Universities together with industry partners, government and communities. Universities can not only create understanding and awareness, but encourage and mobilise the necessary actions to meet the SDGs by providing tangible and practical solutions through research and innovation.

b. **the potential costs, benefits and opportunities for Australia in the domestic implementation of the SDG:**

Implementation of the SDGs in Australia, particularly by the university sector, provides benefit and opportunities, as demonstrated across our multiple pathways of influence as noted above:

1. Teaching: ensures that Australia and Australian universities are leading educators for sustainable development, this will be necessary to position ourselves within the international education market
2. Research: our researchers contribute to future solutions internationally especially in the Indo-Pacific region, exporting our expertise regionally and globally
3. Engagement: universities have a strong role to play in addressing social inequalities and disadvantage in our communities and enabling opportunities for all Australians. This provides an immense contribution for Australia. For example, the UTS Social Impact Framework\(^1\) and the UTS commitment to Indigenous Education and Employment.\(^2\)

**Recommendation:** Federal government to invest in universities as key implementers of the SDGs and to value the contribution to multiple dimensions of export and trade, diplomacy in the region.

Federal government to invest in universities as leaders in reducing inequalities and disadvantage in Australia.

d. **how can performance against the SDG be monitored and communicated in a way that engages government, businesses and the public, and allows effective review of Australia’s performance by civil society:**

We can make explicit the connection between the work of universities and the SDGs. ISF-UTS demonstrated this by ‘mapping’ our contribution across all 17 goals. We found that ISF’s 10 areas of research contribute knowledge and evidence to support every one of the 17 goals. Each of our research areas align with at least five goals. This work cuts across research and consultancy activities both in Australia and internationally, highlighting the transient nature of development challenges.

Universities can report on their contribution to SDGs through standard measures and metrics provided to government, through alignment with grants and government tenders, and through our engagement with the wider community.

**Recommendation:** Connect university teaching, research and community engagement to SDGs and highlight the interlinkages and synergies and potential trade-offs associated with sustainable development.