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Australian Academy of Science

SUBMISSION TO THE

SENATE INQUIRY INTO THE SUSTAINABLE DEVELOPMENT GOALS

AUSTRALIAN ACADEMY OF SCIENCE AND
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Submission on the United Nations Sustainable Development Goals (SDGs)
Australian Academy of Science and Future Earth Australia

Introduction

The Australian Academy of Science (the Academy) and Future Earth Australia (FEA) are pleased to make this joint submission on Australia's engagement with the UN Sustainable Development Goals, and would be pleased to discuss these issues further with the Committee.

The Australian Academy of Science was established by Royal Charter in 1954 to champion, celebrate and support excellence in Australian science, to promote international scientific engagement, to build public awareness and understanding of science and to provide independent, authoritative and influential advice. The Academy comprises almost 550 of Australia's leading scientists, each elected for their outstanding contribution to science.

The Academy is actively involved in international collaborative work on the SDGs through its membership of the International Council for Science (formerly the International Council of Scientific Unions (ICSU) and the Inter-Academy Partnership (IAP). The Academy currently has a Fellow on an IAP expert committee considering global scientific advice for policy and strategies for attaining the SDGs (http://www.interacademies.org/36061.aspx)

Future Earth Australia is the Australian hub of Future Earth. Future Earth is an international sustainability collaboration established in 2015 to promote and support international research and development for long-term sustainability solutions for the planet and human societies. FEA was established by the Academy in 2015 to promote and support sustainability research and transformations at the national level by acting as a contributor, conduit, and collaborator as between and across multiple stakeholders, aligned to the SDGs. FEA has a membership comprising Australian universities and publicly-funded research agencies, with strong links to industry and governments.

FEA also contributes directly to research agendas and aims to collaborate and co-design positive, evidence-led outcomes aligned to the SDGs. A current focus of FEA with relevance to the SDGs is a focus on Australian Urban Systems Transformation (AUST).

Executive summary

- Australia's progress against the SDGs is mixed. Australia is ranked 26th of 157 nation states and 23rd in the OECD (35 states).

- Science and technology and evidence-based science policy advice have a significant role to play in delivering the SDGs.

- There are critical interdependencies between the goals and associated targets. Appropriate attention must be paid to these as there is a risk that potential strategies for one goal may impact negatively on others.

- Given the heavy inter-dependencies between the SDGs, governance and accountability will depend on drive and oversight from a central agency with domestic and international perspectives and authority to act. This agency needs to have an effective advisory framework that draws advice from all relevant stakeholders. Appropriate attention must be paid to these inter-dependencies because of the risk of negative impacts in one area for the benefit of another, and the risk of losing synergies between areas.

- Translation of the SDGs to the Australian context at various levels, combined with the above governance principles to encourage broader ownership and engagement, can ensure performance monitoring by separate key stakeholders against the SDGs, and communicate these in a way that is independent from government and allows for broader societal engagement.

- Australia is engaged in significant international work on the SDGs at regional and global levels through universities, publicly-funded research agencies, small and large businesses, not-for-profit organisations and government agencies. There would be benefit to Australia in collating and sharing information and learnings from these various activities across diverse stakeholder groups.

- The Australian academic community can contribute to the SDGs in many ways, including multi-disciplinary research relevant to the SDGs, collaborative approaches to the translation of SDGs to the Australian, state and local contexts, mapping of the many complex but critical interdependencies, and development and monitoring of key indicators of progress. FEA are well positioned to assist in this and operate in partnership with other key though separate networks in this space.

- Information and communication technology (ICT) and the new data technologies offer considerable opportunity for Australia to gain economic value and improve performance towards the SDGs.

- The understanding and awareness of the SDGs across government(s) and the community has seen some growth in recent times, but remains limited and fragmented.

- Existing data sets are inadequate to give a full assessment of progress towards the SDGs. Currently there is considerable international work, in which Australia is involved, considering how to more effectively and completely measure relevant key performance indicators. This requires ongoing research.

Detailed response

The SDGs, endorsed in 2015, are underpinned by recognition of global threats arising from environmental, social and economic challenges, and the potential of sustainable development to address these inter-related threats.[1] The SDGs recognise the value of collaboration and interconnectivity both across the individual goals, and with separate global agreements. Notably these are the 2015 *Paris Accord* to limit global greenhouse gas emissions, and the Sendai Framework for Disaster Risk Reduction (March 2015).

Australia's progress on the SDGs is mixed. The 2017 SDG Index and Dashboard[2] prepared by the Bertelsmann Stiftung and the Sustainable Development Solutions Network ranked Australia 26th of 157 nation states and 23rd in the OECD (35 states). Performance was best on SDG 1, 3, 4, 6 and 11 and worst on 2, 12, 13, 14 and 15. While the data and indicators to reliably measure and track progress require further development (see below), this Dashboard is a useful early indicator of global progress and also where Australia should focus attention at a national level.

Science and technology (S&T) are important to advancing the SDGs in two significant ways. First, S&T (including research) can contribute directly; see, for example, *The Contribution of Science in Implementing the Sustainable Development Goals*[3] published by the German Committee for Future Earth. Secondly, evidence-based science policy advice can be an important input to wider policy responses.[4] While science and evidence-based science policy advice are important to many, if not all of the SDGs, to be effective these must be developed and/or tendered with recognition of the social, cultural and political contexts in which they will be implemented. This is particularly true of the goals on which Australia's progress is poorest.

Future Earth has a central focus on the need for a multidisciplinary approach to research and collaboration with civil society and other stakeholders. This was also the focus adopted by the Australian Council of Learned Academies (ACOLA) in delivering for the Office of the Australian Chief Scientist the *Securing Australia's Future* project[5]. While written between 2012 and 2016, many of the SAF reports addressed issues and made findings that remain relevant to the SDGs. The Academy believes a similar program, drawing on the expertise in the four learned academies, and focussed specifically on the SDGs would be a framework to explore optimal approaches to the SDGs.

There are very significant and important interdependencies, inter-relations and connections between the 17 goals, see eg the ICSU report *A Guide to SDG Interactions: From Science to Implementation*[6]. Since these interactions can be both positive and negative, they have important implications for governance. In particular, a siloed approach to the goals can easily result in responses and strategies to advance a particular goal resulting in deleterious effects on others. Conversely a holistic view of the SDGs has the potential to enable synergies and trade-offs across both the goals themselves and the various sectors and stakeholders involved.

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[1] UNEP, 2018, http://www.undp.org/content/undp/en/home/sustainable-development-goals/background.html

[2] See http://www.sdgindex.org/#full-report

[3] http://futureearth.org/sites/default/files/2016_report_contribution_science_sdgs.pdf

[4] See eg, *Remarks to The Multi-Stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals,* Sir Peter Gluckman, Chair International Network for Government Science Advice (INGSA) and Chief Science Advisor to the Prime Minister of New Zealand, New York, May 16, 2017**;** http://www.pmcsa.org.nz/wp-content/uploads/Sir-Peter-Gluckman-Speech-to-UN-STI-Forum-of-SDGs-16-May.pdf

[5] https://acola.org.au/wp/securing-australia-s-future

[6] https://www.icsu.org/publications/a-guide-to-sdg-interactions-from-science-to-implementation

Within any nation state successful implementation of the SDGs will involve collaboration of many stakeholders including government, business, civil society, academia and research organisations. This is particularly so in Australia with our three levels of government. Thus, it is important that the goals are effectively communicated downwards and indicators translated to effective measures at more local levels. In this context, FEA's program on Australian Urban Systems Transformation is a significant case-study relevant to SDG 11-Sustainable Cities and Communities, though the AUST program inherently recognises that there are inter-dependencies across most, if not all, of the SDGs and that it is in recognising these interdependencies that important progress and efficiencies can be made.

Our core aim in this submission is to demonstrate that:

i.   implementation of the SDGs requires a consistent national framework that effectively incorporates scientific inquiry and evidence into enabling decision-making at national, state and local levels of government, and promotes engagement with the business sector and civil society

ii.   greater multidisciplinary collaboration with the academic and research community could leverage on current research efforts to enable implementation of the SDGs. This is particularly so of the Goals--2, 12, 13, 14 and 15—on which Australia's performance is weakest. All these involve significant research challenges that cross the bio-physical-social interfaces and complex, contested policy spaces

iii.   considerable work has been done and is being done internationally in the science community and its networks that is relevant to Australia and Australia's response to the SDGs.

In advancing these aims, this submission draws on some specific examples to illustrate these broader points while making specific comments **with respect to Terms of Reference a-d, and h.**

This submission recommends that all sectors take the opportunity for leadership on the SDGs. Both the Academy and FEA are able to each play a role in bringing these sectors together both for the benefit of implementing the SDGs in Australia and linking to global research networks via the International Science Council, IAP and Future Earth Australia.

Term of Reference a. The understanding and awareness of the SDGs across the Australian Government and in the wider Australian community

There has been an effort by some networks in Australia to build understanding and awareness of the SDGs across government and in the wider Australian community. Links to government have been advanced most notably through the Asia-Pacific Sustainable Development Solutions Network (SDSN-AP); though traction into policy remains fragmented. The SDSN-AP has encouraged awareness in the university sector and produced a useful Guide.[7]

Within organised science in Australia and globally recognition is growing but still limited. The IAP has recently produced a Guide[8] specifically aimed at merit-based academies that aims to enhance

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[7] *Getting started with the SDGs in Universities*, http://ap-unsdsn.org/wp-content/uploads/2017/08/University-SDG-Guide_web.pdf

[8] *Supporting the Sustainable Development Goals: A Guide for Merit-Based Academies;* http://www.interacademies.org/37864/IAP_SDG_Guide

understanding of the SDGs, encourage academies to become more involved and profiles a number of initiatives by various academies. The Australian Academy has promoted the guide to its Fellowship and more widely and it is on our web site.

While not explicitly devoted to the SDGs, the Academy's Theo Murphy High Flyers Think Tanks have, in recent years, all had a relevance to the SDGs.[9] The Academy sees the Theo Murphy Think Tanks as an excellent way to involve the next generation of scientists (including social scientists) in thinking about challenging multi-disciplinary problems such as the SDGs.

Similarly, the Academy's focus on promoting and encouraging gender equity in science through its leadership with the Academy of Technology & Engineering of *Science in Australia Gender Equity* (SAGE),[10] which is piloting the Athena SWAN Charter program Australia goes to the heart of SDG 5— Gender Equality. Internationally, the Academy has also pursued gender as a key area of focus for the IAP and particularly its Asian regional group, the Association of Academies and Societies for Science in Asia (AASSA). Encouraged by the Academy, AASSA established a Special Committee on Women in Science and Engineering in Asia, which is chaired by Professor Cheryl Praeger AM FAA.

With respect to the wider community, our assessment would be that the SDGs have had some traction, notably youth engagement in activities such as those of Questacon, the development of the SDSN Youth at Monash University, and Young Australians' Plan for the Planet (the latter a joint FEA-ANU initiative).

However, discussion among attendees to the Australian SDG 2018 summit held in Melbourne on 13 March 2018 evidenced a broad view that alignment to the SDGs for Government remains largely a retrofitting exercise, undertaken by individual departments within various government agencies, or is otherwise focused on activities in developing countries through various aid programs. The Academy and FEA share this view. This perspective on the part of Government means that Australia misses an important opportunity to recognise the various efficiencies and positive social, environmental and economic outcomes that the SDGs can provide.

Term of Reference b. The potential costs, benefits and opportunities for Australia in the domestic implementation of the SDGs

The goals for which Australia's progress is poorest offer considerable opportunities. Seeking to advance these goals from a foundation of research and innovation will drive significant new business opportunities. Similarly, in goals for which Australia's performance is better, there remain areas where Australia does not meet the aspirations established by the SDGs. Appropriately translated to the Australian domestic context, these gaps present clear opportunities and potential net benefits.

FEA's current focus, namely, Australian Urban Systems Transformation (AUST) provides an informative case study. Initially coordinated by Australian National University (ANU) and CSIRO researchers, from the outset the initiative involved a broader network of researchers and stakeholders.[11] AUST recognised the value of translating the SDGs to the Australian urban context,

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[9]See especially *Rethinking food and nutrition science* (2017), and *An interdisciplinary approach to living in a risky world* (2016) at https://www.science.org.au/news-and-events/events/think-tanks

[10] http://www.sciencegenderequity.org.au

[11] Webb, B. Bai, X., Stafford Smith, M. Costanza, R., Griggs, D., Moglia, M., Neuman, M., Newton, P., Norman, B., Ryan, C., Schandl, H., Steffen, W., Tapper, N and Thomsen, G., 2018, "Sustainable urban systems: Co-design and framing for transformation" *Ambio* 47(1): 57-77

and confirmed that all 17 goals (i.e. not just SDG 11) and many of the related targets are relevant to urban development, and that there are significant interdependences between the goals.[12] Some further work has been carried out under this initiative to identify specific Australian urban challenges and goals, how these may be expressed in a more focused and integrated way, and how these map to the SDGs. Another example of the translation at the local level is a mapping to the SDGs at the local level for the City of Melbourne.[13]

The AUST initiative also identifies that whilst many Australian metropolitan plans have goals that are broadly consistent with the SDGs, actual implementation in our cities often does not match those goals. In many areas the gaps are likely to widen still further without response to the increasingly evident drivers of change (e.g. digitisation, climate change etc). It also identified typical examples of urban strategies that could address some of the gaps, and some associated trade-offs and synergies. It concluded that framing of issues more broadly, in a way that recognised the multiple goals the strategies can contribute to, could significantly impact cost-benefit evaluations, with synergies looking potentially to be more powerful than trade-offs.

Within the science community and perhaps more broadly there is a tendency to see the relevant science and innovation arising from those sciences identified closely with sustainability. In particular there is a striking lack of recognition of the role that ICT[14] and the new data technologies could play in disrupting conventional approaches thereby generating not only greater progress towards the SDGs but new solutions with clear economic, social, and environmental value to the Australia.

SDG 2—zero hunger is a case in point. Cutting postharvest losses in half in the chain from 'farm to plate' would on one estimate[15] produce enough food to feed a billion people and also reduce significantly greenhouse gas emissions. ICT, other smart technologies and data technologies such as blockchain offer real opportunities to improve the efficiency and security of the food chain. Australia has the relevant skills in ICT, agriculture and data science together with a number of innovative companies and start-ups to be a very significant player globally and generate increased value from one of Australia's most significant sectors.[16]

Term of Reference c. What governance structures and accountability measures are required at the national, state and local levels of government to ensure an integrated approach to implementing the SDGs that is both meaningful and achieves real outcomes

The strong inter-dependencies and interactions between the different goals and associated targets pose challenges for effective governance. While it may be tempting for the Commonwealth government to assign governance and accountability of specific SDGs to departments and/or agencies having the most policy and strategy influence over a particular goal, this increases the risk

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[12] Nilsson, M., D. Griggs, and M. Visbeck, 2016, "Map the interactions between sustainable development goals." Nature 534: 320–322.

[13] City of Melbourne, 2017, *A desktop assessment of how City of Melbourne's strategies and plans deliver on the SDGs*, City of Melbourne, Victoria

[14] See, for example, *How Information and Communications Technology Can Accelerate Action on the Sustainable Development Goals*; http://unsdsn.org/wp-content/uploads/2015/09/ICTSDG_InterimReport_FINAL6_WEB.pdf

[15] *How big data will revolutionize the global food chain*, C.Magnin, August 2016 https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/how-big-data-will-revolutionize-the-global-food-chain

[16] See, for example,, Daly, J, Anderson, K, Ankeny, R, Harch, B, Hastings, A, Rolfe, J, and Waterhouse, R (2015), *Australia's Agricultural Future*, Securing Australia's Future report, ACOLA, https://acola.org.au/wp/7-australias-agricultural-future/

that synergies and trade-offs will be missed. There is also currently a sense that the SDGs are more for 'poor countries' or for Australia important only to our aid programs.

The Academy and FEA believes that the most productive and effective implementation of the SDGs requires oversight and drive from a central agency with both domestic and international perspectives and authority. This agency should be supported and advised by a high-level advisory framework drawn from the various stakeholders. The Academy and FEA would be pleased to participate. Such an approach should ensure that implementation moves beyond the minimal requirement of meeting UN reporting requirements to real action of value to Australia.

Similar principles should apply at state and local levels. The combination of practical goal-setting and implementation may, indeed, have its greatest potential for transformational leverage at the city-region level, which is not well recognised in our 3 tier government arrangements. An example of a new model here is the emerging role of the Greater Sydney Commission in developing the Greater Sydney Region Plan (Greater Sydney Commission 2018). In February 2018, Infrastructure Australia called on the federal government to take leadership of the Australian cities agenda by extending investment beyond grants, and into programs that ensured "structure and accountability".[17] Infrastructure Australia's recent report focussed on managing population growth in major cities, notably in Sydney and Melbourne. One thing to consider in that regard is a broader focus on what 'the urban' means, and extending it beyond Sydney and Melbourne.

Term of Reference d. How can performance against the SDGs 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

To measure the traction of the SDGs in Australia, translation of the goals into specific Australian context(s) is an important step for producing meaningful outcomes from the SDGs.

Again, using the urban context as an example, the Commonwealth Cities Division has developed a set of performance indicators for cities (PM&C 2017), which acknowledges the relevance of the UN SDGs. The above-mentioned AUST initiative has provided the basis for a submission that identifies the desirability of a broader range of KPIs to reflect the multiple SDGs that cities need to address.

While it is important to "Australianise" KPIs and associated data collections to gain traction in Australia it is vital that the capacity to make global comparisons is not lost. To this end, the Academy is working through ICSU's World Data System to encourage the development and deployment of robust and reliable data systems to allow measurement and tracking of the SDGs. Australia's involvement in the World Data Forum through the Australian Bureau of Statistics is a similar important international activity. In Australia, the Academy's National Committee for Data in Science and the proposed National Research Data Cloud are important mechanisms to integrate various data sources relevant to research and innovation in sustainable development and the SDGs.

Ultimately the full assessment and tracking of the SDGs will require new data and the measurement of previously non-quantified indicators. Recently a novel 'world happiness index' has been

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[17] Infrastructure Australia, 2018, Press release "Infrastructure Australia calls for national leadership on cities", 23 February 2018, http://infrastructureaustralia.gov.au/news-media/media-releases/2018/2018_02_23.aspx

developed[18] by the Sustainable Solutions Network and the Global Happiness Council, a new global network of leading academic specialists and practitioners in areas ranging from psychology, economics, urban planning, civil society, business and government. This index tracks six key variables that have been found to support well-being: income, healthy life expectancy, social support, freedom, trust and generosity. Australia ranks 10th on this index. While still embryonic such indices are needed in a world committed to the SDGs. Big data and the new data technologies offer scope here.[19] Such considerations are now entering the mainstream of data for national progress. They will be the theme of a workshop in London in April convened by the International Network of Government Science Advisers (INGSA) and OECD that one of us (MNB) will be attending[20]. To be most effective these initiatives need a close collaboration between conventional statisticians and statistical agencies, data scientists and domain experts and practitioners.

Term of Reference h. Examples of best practice in how other countries are implementing the SDGs from which Australia could learn

The following offers an overview of examples of best practice in how other countries are implementing the SDGs, which in turn may offer insights for Australia's approach to implementing.

Finland

In 2017 the Government of Finland reported to its Parliament on national implementation of the 2030 Agenda for Sustainable Development. The Government's implementation has been based on a two-pronged approach: first, securing carbon neutrality and wise use of resources, and second, ensuring non-discrimination and equality. The Prime Minister's Office houses a Sustainable Development Coordination Secretariat, which coordinates national actions to fulfil the 2030 Agenda. It also leads the National Commission on Sustainable Development, which has been operating for 23 years, and works in close coordination with the country's Development Policy Committee. The Secretariat requested the Government's line ministries to identify existing policies, measures, activities and budgets that are contributing to achievement of the 17 SDGs. This mapping exercise informed the development of Finland's 2030 Agenda National Implementation Plan.

On the ecological aspects of fulfilling the 2030 Agenda, Finland is focused on increasing the share of renewables in its energy mix, producing environmentally-friendly services and products, and developing low-carbon forms of transport. On social inclusion, Finland has prioritized preventing youth and long-term unemployment, avoiding the exclusion of minorities, preventing inequality in the housing and labour markets, supporting lifelong learning, and ensuring equal access to human services.

Canada

Canada ranks 17th on the Dashboard and like Australia, is weakest on SDGs 12 and 15. In a speech to the UN General Assembly, Prime Minister Justin Trudeau affirmed that, "the Sustainable Development Goals are as meaningful in Canada as they are everywhere else in the world, and we

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[18] http://worldhappiness.report/ed/2018/

[19] See, for example, *A World that Counts: Mobilising the Data Revolution for Sustainable Development*, UN Secretary-General᾽s Independent Expert Advisory Group on the Data Revolution for Sustainable Development, 2014. http://www.undatarevolution.org/wp-content/uploads/2014/11/A-World-That-Counts.pdf

[20] See also the ICSU program for Urban Health and Wellbeing; https://www.icsu.org/what-we-do/research-programmes/thematic-organizations/urban-health-wellbeing

are committed to implementing them at home while we also work with our international partners to achieve them around the world."[21] From an Australian perspective, Canada is a very interesting benchmark in that it has a large and dispersed population, is a federal system, and is resource rich with a significant indigenous population.

Canada has been used as a case study by the Brookings Institute as to their efficiencies in implementing the SDGs. The methodology adopted to measure Canada's progress, as well as their achievements to date, offer good examples for the Australian context.[22]

Other examples

The principles of sustainable development are incorporated into their national legal frameworks of many countries, including at constitutional level. Sustainable development is stipulated in Switzerland's Federal Constitution and thus an objective for all state authorities. It must be integrated from the start in existing planning and control processes of the Federal Council, the departments and offices of the Federal Administration.

Estonia has undertaken a gap analysis of its policies and SDGs and found that gaps remained in achieving productivity growth, developing an energy- and resource efficient economy, lowering CO2 emissions per capita, an improvement in the subsistence of low income people and tackling the gender pay gap. Estonia, Finland and the Republic of Korea are among the countries that have included sustainable development and the 2030 Agenda in school and university programmes and have included it in teaching materials. In Norway, the Ministry of Education has recommended the inclusion of the SDGs as part of the curriculum in schools. The Republic of Korea has encouraged the inclusion of content on the SDGs in textbooks for primary and secondary school students.

In Mexico, the Office of the Presidency plays a key role in building partnership with private sector, particularly through the establishment of the Sustainability Alliance, an institutional mechanism and platform for dialogue between the government and 80 Mexican and multinational firms to promote the integration of the SDGs in business models and design international cooperation projects in line with the 2030 Agenda. The government of Republic of Korea, in its partnership with the UN Global Compact, is involved with more than 280 companies of all sizes in both the public and private sectors which has been particularly active in disseminating ideas on the implication of the SDGs for business and sharing the good practices of private companies' actions to support for the SDGs.

Regional networks

In their VNR, countries have noted that national plans and strategies were being aligned not only with the 2030 Agenda, but also with regional frameworks. For example, Cyprus, the Netherlands, Portugal, Sweden, and Slovenia were among the countries that reported on their work to ensure that European Union policies and actions support the implementation of the SDGs.

Numerous countries highlighted in their VNR that the key to success in attaining the SDGs is the willingness and resolve to form partnerships at national and international levels. Belgium, Brazil,

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[21] See https://www.brookings.edu/blog/future-development/2017/10/04/even-canada-needs-breakthroughs-to-reach-un-global-goals/
[22] See https://www.brookings.edu/research/who-and-what-gets-left-behind-assessing-canadas-domestic-status-on-the-sustainable-development-goals/

Indonesia, Japan, Kenya, Portugal, Qatar, Slovenia, Tajikistan and Thailand were among the countries that reported on national level, multi-stakeholder partnerships with a wide range of stakeholders such as local governments, NGOs, academia, the private sector, international organisations, and other actors, including parliamentarians, scientists and cooperatives stakeholders. Denmark noted that partnerships are essential for achieving the SDGs as vehicles for innovation, investment, and for disseminating solutions and leaving no one behind.

Conclusion

Implementation of the SDGs requires a consistent national framework to enable decision-making at state and local levels of government, and promote certainty for the business sector. To ensure transparency and accountability, it should be supported by an independent entity that has national and global reach, and the ability to leverage on greater collaboration with the academic community, to ensure a best practice evidence base informs policy, enabling the effective implementation of the SDGs.

The interdependencies between the SDGs, and the necessity of a scientific approach to their implementation, is critical. The Australian academic community can contribute to the above in many ways, including collaborative and evidenced based approaches to the implementation to the SDGs in Australia.

A core focus of the Academy and a central purpose of FEA is to identify specific, cross-sectoral contexts, and to enable both the necessary translation and implementation of the SDGs to ensure meaningful outcomes. To this end, critical areas for attention in the Australian include biodiversity, climate change, cities, digital transformation, and energy security, among other areas.[23] (FEA, 2015). Doing this ensures that the conversation moves from 17 SDGs and their 169 targets, to an integrated and whole-of-system approach to implementation of goals that will ensure a sustainable, prosperous and resilient Australian future.

To discuss this submission, please contact:

For Future Earth Australia, Director Dr Tayanah O'Donnell (tayanah.odonnell@science.org.au)

For the Australian Academy of Science and particularly the IAP, Emeritus Professor Michael Barber AO, FAA, FTSE, Member, Expert Committee on Improving Scientific Input to Global Policymaking: Strategies for Attaining the Sustainable Development Goals, InterAcademy Partnership (mnjkbarb@yahoo.com.au)

For the sustainable urban development initiative (AUST) FEA program, Dr Bob Webb of the Australian National University (bob.webb@anu.edu.au).

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[23] Future Earth Australia, 2015, *A plan for Future Earth Australia: Enabling Australia's social, economic and environmental future,* https://www.science.org.au/files/userfiles/support/documents/future-earth-plan.pdf