# TRACKING AUSTRALIA’S PROGRESS ON THE SUSTAINABLE DEVELOPMENT GOALS

# THE AUSTRALIAN GOVERNMENT’S REPORTING PLATFORM

United Nations High-Level Political Forum on Sustainable Development 2018

JORDANA ANGUS

Jordana is an established contemporary Wiradjuri artist and emerging jeweller. Her traditional land is Narrandera New South Wales but she was born and raised in Redcliffe, Queensland. This location has given Jordana an innate connection to where the land meets the sea. Jordana has drawn inspiration through reclaiming childhood cultural memories and connection to country to design 17 individual, yet interconnected, art strips symbolising each of the 17 interconnected Sustainable Development Goals. By imposing cultural stories and traditions in contemporary practice, using bright colours, abstract black in landscape drawings and experimentation with mixed mediums, Jordana raises awareness of personal stories and the search for the beauty that can be found in the everyday

This booklet was designed and typeset by Carbon Creative, engaged through the Commonwealth Government’s Indigenous Procurement Policy. Original Australian SDG artwork by Jordana Angus.

Creative Commons

With the exception of the Commonwealth Coat of Arms and where otherwise noted, such as copyrighted images, this booklet is licences under a Creative Commons Attribution-NonCommercial 4.0 International License.

Use of the Coat of Arms

The terms under which the Coat of Arms can be used are detailed on the It’s an Honour website, https://www.pmc.gov.au/governmnet/commonwealth-coat-arms

Inquiries

Inquiries regarding the licensing and any use of his booklet are welcome at:

Department of Foreign Affairs and Trade

RG Casey Building

John McEwen Crescent

BARTON ACT 0221 Australia

Telephone: +61 6261 1111

**Executive Summary**

This paper outlines the Australian Government’s approach to data for reporting on the Sustainable Development Goals (SDGs) and introduces the Reporting Platform on the Sustainable Development Goals global indicator framework (SDG Indicators). The Reporting Platform and this paper form part of a comprehensive package of reporting on Australia’s progress on the SDGs alongside the 2018 Voluntary National Review and the Australian SDGs website (www.sdgs.org.au).

The Reporting Platform is a whole-of-government initiative, funded by the Department of Foreign Affairs and Trade, produced by the Australian Government’s Department of the Environment and Energy, in close cooperation with the Australian Bureau of Statistics and Commonwealth Scientific and Industrial Research Organisation, and draws on data contributions from across the Australian Government.

***The Reporting Platform******provides single point of access to anyone wishing to find out about the status of Australia’s data on each of the SDG Indicators.***

The Reporting Platform will assist stakeholders responsible for compiling reports on country, regional and global progress against the SDGs. It will also assist with streamlining reporting that is required for other purposes, such as the Sendai Framework for Disaster Risk Reduction.

The Reporting Platform will be updated as more datasets are confirmed and/or as the work program on the SDG Indicators progresses. While every effort is being made to include datasets where possible and appropriate, the Platform will not report against all 232 SDG Indicators. Not all SDG Indicators are relevant or applicable for the Australian context and in these cases it would not be a proper or efficient use of resources to establish datasets that track them.

Data can contribute to a strong evidence base to inform policy, processes and decisions at the local, national, regional and global level. Australia is committed to presenting robust, relevant and timely data to assist with analysis of Australia’s progress towards the SDGs. The Reporting Platform delivers on this commitment. This paper contains additional information on the approach Australia has taken to establish reporting on the SDG Indicators, proposed future work on the SDG Indicators, and examples of SDG data partnerships that Australia has formed.

This paper also highlights examples of Australian innovation on data collection. Increasingly, decision-makers are accessing innovative data solutions, like Earth Observation technology, to inform assessments of SDG performance. Australia is at the forefront of designing and deploying innovative solutions, including the application of big data. Some of these methods can help to assess performance against the SDGs at the Goal and Target level.

The Reporting Platform is dynamic. As agencies continue to identify datasets and as the SDG Indicators themselves are further refined or upgraded in Tier status, additional datasets will be uploaded. The Platform will be continually updated as new data becomes available, and historical data will be retained for reference.

For further information, see [www.sdgdata.gov.au](http://www.sdgdata.gov.au) and [www.dfat.gov.au/2030agenda](http://www.dfat.gov.au/2030agenda).

**Acronyms and Terms**

|  |  |
| --- | --- |
| ABS | Australian Bureau of Statistics  |
|  |  |
| ANDI | The Australian National Development Index |
|  |  |
| AURIN | Australian Urban Research Infrastructure Network |
|  |  |
| AP-DEF | Asia Pacific Development Effectiveness Facility |
|  |  |
| ARDC | Africa Regional Data Cube |
|  |  |
| BITRE | Bureau of Infrastructure, Transport and Regional Economics  |
|  |  |
| CEOS | Committee on Earth Observation Satellites |
|  |  |
| COAG | Council of Australian Governments  |
|  |  |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation  |
|  |  |
| Data Plan | National Infrastructure Data Collection and Dissemination Plan |
|  |  |
| DEA | Digital Earth Australia  |
|  |  |
| DFAT | Department of Foreign Affairs and Trade |
|  |  |
| DoEE | Department of Environment and Energy  |
|  |  |
| EO | Earth Observation Data |
|  |  |
| FAO | Food and Agriculture Organisation |
|  |  |
| FRA | Forest Resources Assessment |
|  |  |
| GFG | Global Forest Goals |
|  |  |
| GPS | Global Positioning Satellites |
|  |  |
| GovCMS | GovCMS is an open source content management system available to all levels of Australian government |
|  |  |
| HLPF  | High Level Political Forum |
|  |  |
| IAEG-SDGs | Inter-Agency Expert Group on SDGs |
|  |  |
| IDM | Individual Deprivation Measure |
|  |  |
| IOC-UNESCO | Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation  |
|  |  |
| MODIS | Moderate Resolution Imaging Spectroradiometer |
|  |  |
| NASA | National Aeronautics and Space Administration |
|  |  |
| NSDC | The National Sustainable Development Council |
|  |  |
| ODA | Official Development Assistance |
|  |  |
| ODC | Open Data Cube  |
|  |  |
| OECD | Organisation for Economic Cooperation and Development  |
|  |  |
| PIF | Pacific Islands Forum |
|  |  |
| SDGs | Sustainable Development Goals  |
|  |  |
| Sendai  | Sendai Framework for Disaster Risk Reduction 2015-2030 |
| Framework |  |
| SPC | Secretariat of the Pacific Community |
|  |  |
| TraNSIT | Transport Network Strategic Investment Tool |
|  |  |
| VNR | Voluntary National Review  |
|  |  |
| UN | United Nations |
|  |  |
| UNCCD | United Nations Convention to Combat Desertification |
|  |  |
| UNDP | United Nations Development Program |
|  |  |
| UNECE | United Nations Economic Commission for Europe |
|  |  |
| UNEP | United Nations Environment Program |
|  |  |
| UNESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
|  |  |
| UNICEF | United Nations Children’s Fund  |
|  |  |
| UNISDR | United Nations Office for Disaster Risk Reduction  |
|  |  |
| UNSC | United Nations Statistical Commission |

**Contents**

|  |  |
| --- | --- |
| Executive Summary | 1 |
| Acronyms and Terms | 3 |
| Australia and the SDG Indicators | 5 |
| Examples of complementing SDG Indicators at the local level | 6 |
| The SDG Indicators | 7 |
| Examples of Australia’s involvement in the development of the SDG Indicators | 8 |
| Developing Australia’s Reporting Platform | 12 |
| Examples of links between the SDG Indicators and other reporting mechanisms | 18 |
| Applying Australian data innovations to the SDGs | 20 |
| Innovation in Infrastructure data | 24 |
| Data partnerships | 28 |
| Annex: Pacific Island Countries Regional Approach to monitoring the SDGs and the Indo-Pacific approach to monitoring the SDGs | 32 |
| References (List of relevant websites and references) | 33 |

**Australia and the SDG Indicators**

"Australia supports a robust and pragmatic approach to the indicator framework and their measurement, recognising that every country here has challenges in measurement and reporting. In this context, perfection is the enemy of the good. So, we support adoption of the framework, and the further work of the Inter-Agency Expert Group on the SDGs to continue refining the indicator set. Australia recognises the important capacity building activity required over coming years and will continue to play our part within our region."

*David W. Kalisch, Australian Statistician, (Australian Bureau of Statistics) at the UN Statistical Commission adoption of the SDG Indicators, March 2017*

The SDG Indicators provide a practical starting point from which countries can begin to assess and measure progress. The UN Statistical Commission has noted that countries will be expected to approach the SDG Indicators, and the associated work required around data analysis, identification and reporting, in line with their own national priorities and capabilities.

Accordingly, not all of the SDG Indicators are relevant or applicable for the Australian context and it would not be a proper or efficient use of resources to establish datasets to track these SDG Indicators. Our assessment of each Indicator’s relevance and applicability is reflected on Australia’s Reporting Platform according to a colour coding system.

In some circumstances, there may be alternate Indicators that are more appropriate for the Australian context, particularly considering the breadth of diversity of people and place in Australia. Australia’s measurements for poverty and hardship and the National Cities Performance Framework are examples of this. Again, the use of bespoke national-level indicators is in keeping with the intention of the SDG Indicator framework, with the UN having acknowledged that the SDG Indicators could be complemented by indicators at the regional and national levels.

**Examples of complementing SDG Indicators at the local level**

**SDG 1: End poverty in all its forms everywhere**

*Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day*

*Indicator 1.1.1: Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)*

There is no official poverty measure used in Australia and no single, agreed, objective indicator of poverty or financial stress. The most common poverty measures, including that used by the OECD, focus on income alone. Australia has one of the highest median equivalised household disposal incomes in the world, which means that the Australian relative income poverty line is set at a higher level of income relative to most other countries.

Australia draws on a range of indicators to determine poverty and hardship. It is important to consider a range of indicators of persistent disadvantage to understand poverty and hardship, and its multi-dimensional nature. Different indicators point to different dimensions of poverty.

**SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable**

***Australia’s National Cities Performance Framework***

Australia’s Smart Cities Plan commits to measuring the success of our policies and informing Australians about the trends and changes in our cities. The [National Cities Performance Framework](https://smart-cities.dashboard.gov.au/all-cities/overview) supports this approach by bringing together critical economic, social and environmental data for Australia’s largest cities into an easily accessible Dashboard. The Dashboard is the first official framework of its kind in Australia and was developed to help Australia’s three levels of government, industry and communities to better understand the performance of our cities. The Dashboard focuses on seven areas:

* Context
* Jobs and Skills
* Housing
* Infrastructure and Investment
* Liveability and sustainability
* Innovation and digital opportunities
* Governance, planning and regulation

The indicators on the Dashboard are from a wide range of data sources and are consistent across cities, allowing users to consider multiple indicators together, to provide detailed insights into a city and its performance.

**The SDG Indicators**

The UN Inter-Agency Expert Group on the SDGs (IAEG-SDGs) classify the SDG Indicators into three tiers on the basis of their level of methodological development and the availability of data at the global level.

Tier I: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of population in every region where the indicator is relevant.

Tier II: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

Tier III: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.

As of May 2018, there were 244 SDG Indicators in total. However, since nine indicators repeat under multiple Targets, there are only 232 individual Indicators. Of these, 93 are Tier I, 72 are Tier II and 62 are Tier III. There are also 5 Indicators with components split across multiple tier classifications.

**Australia’s involvement in the development of the SDG Indicators**

Australia has been actively involved in the development of the SDG Indicators. As outlined in the following examples, a number of Australian Government agencies have provided statistical and technical expertise and advice on the SDG Indicator concepts, specifications and methodology. Australia also sits as an observer on the Inter-Agency Expert Group on SDGs (IAEG-SDGs). Australia will continue to engage in relevant SDG Indicator forums in the future, including the UN Statistical Commission, IAEG-SDG and the World Data Forums.

**Examples of Australia’s involvement in the development of the SDG Indicators**

**SDG8 and SDG12**

**The Global Material Flow and Resource Productivity Database**

*8.4.1/12.2.1 Material footprint, material footprint per capita, and material footprint per GDP*

*8.4.2/12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP*

*Custodian agency: UN Environment Program*

Australia’s Commonwealth Scientific and Industrial Research Organisation (CSIRO) leads an international consortium of research institutes that curate a large global and country by country database for primary material extraction, trade and material footprint which covers the period 1970 to 2017. This database allows countries, including Australia, to report progress on SDG Indicators 8.4.1 (repeats at 12.2.1) and 8.4.2 (repeats at 12.2.2). The database is a public good resource hosted by the UN Environment International Resource Panel and is available online at <http://www.resourcepanel.org/global-material-flows-database>.

Material Footprint (MF) is the attribution of global material extraction to domestic final demand of a country. The total material footprint is the sum of the material footprint for biomass, fossil fuels, metal ores and non-metallic elements. It is calculated as raw material equivalent of imports (RMEIM) plus domestic extraction (DE) minus raw material equivalents of exports (RMEEX). For the attribution of the primary material needs of final demand a global, multi-regional input-output (MRIO) framework is employed.

Domestic Material Consumption (DMC) is a standard material flow accounting (MFA) indicator and reports the apparent consumption of materials in a national economy. It is calculated as direct imports (IM) of material plus domestic extraction (DE) of materials minus direct exports (EX) of materials measured in metric tonnes. DMC measure the amount of materials that are used in economic processes. It does not include materials that are mobilized the process of domestic extraction but do not enter the economic process.

**SDG14**

**Marine Acidity**

*14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations*

*Custodian agency: The Intergovernmental Oceanographic Commission of the UN Educational, Scientific and Cultural Organisation (IOC-UNESCO)*

Currently a Tier III Indicator, CSIRO and partner organisations have worked closely with IOC-UNESCO on the development of methodology for measuring and reporting of marine acidity for SDG Indicator 14.3.1.

The proposed methodology calls for the mean (monthly or annual) surface seawater pH and aragonite saturation state, based on ocean acidification observations. These observations must include: two parameters of the carbonate system (Dissolved Inorganic Carbon, total pH, pCO2, total alkalinity), in situ seawater temperature and salinity. The observations must include the original data used to calculate the means.

Australia (CSIRO) is a focal point for the UN's Communities of Ocean Action on evaluating commitments to SDG Indicator 14.3.1 - a role shared with the IAEA Environmental Labs, Monaco - and also co-chairs the Global Ocean Acidification Observing Network. A data portal (http://goa-on.org) provides access to data and visualisations.

In Australia, CSIRO has collaborated with the Great Barrier Reef Foundation and resources company Rio Tinto to monitor ocean acidification on the Great Barrier Reef. A Rio Tinto commercial ship has been instrumented to monitor how water chemistry is changing. CSIRO operates other ocean acidification monitoring sites around Australia through the Integrated Marine Observing System. These data are publicly available through the Australian Ocean Data Network in near real-time and as delayed mode quality-controlled data.

**SDG 15**

**Land degradation**

*15.3.1 Proportion of land that is degraded over total land area*

*Custodian agency: The UN Convention to Combat Desertification (UNCCD)*

Land degradation is defined as the reduction or loss of the biological or economic productivity and complexity of rain fed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from a combination of pressures, including land use and management practices.

The Indicator is a binary - degraded/not degraded - quantification based on the analysis of available data for three sub-indicators: Trends in Land Cover, Land Productivity and Carbon Stocks.

**Land cover:** Land cover refers to the observed physical cover of the Earth’s surface which describes the distribution of vegetation types, water bodies and human-made infrastructure. It also reflects the use of land resources (i.e. soil, water and biodiversity) for agriculture, forestry, human settlements and other purposes.

Land productivity Land productivity refers to the total above-ground net primary production (NPP) defined as the energy fixed by plants minus their respiration, which translates into the rate of biomass accumulation that delivers a suite of ecosystem services.

Carbon stocks: Carbon stock is the quantity of carbon in a “pool”, a reservoir which has the capacity to accumulate or release carbon, and is comprised of above- and below-ground biomass, dead organic matter, and soil organic carbon (SOC). Currently, carbon stocks are assessed using SOC measured in the top 30cm of the soil, and this will be replaced with a total carbon stock method once developed.

CSIRO worked with UNCCD to develop methodologies and guidance for the use of remote sensing and modelling methods to report on SDG Indicator 15.3.1. This work has been instrumental in the reclassification of the Indicator from a Tier III to a Tier II in November 2017.

In particular, CSIRO developed the Good Practice Guidance report (GPG) to assist countries in implementing the agreed methodology. The GPG describes the methods to select, process and interpret data to support countries in their assessment and quantification of land degradation. GPG also assists countries in accessing and interpreting a wide range of data sources for the sub-indicators, including Earth observation and geospatial information.

Reporting on 15.3.1 will be carried out using the existing national reporting templates of the UNCCD, and the ***Trends.Earth*** analysis portal, which implements the CSIRO GPG methods. Reporting will begin in 2018 and will occur every four years thereafter until 2030. Other Australian desert and land degradation scientists are working closely with the UNCCD and other international organisations to assist with the implementation of this goal.

**Developing Australia’s Reporting Platform**

***Step 1: Identifying data***

Australia’s national statistical agency, the Australian Bureau of Statistics (ABS), conducted a data mapping exercise on the SDG Indicators, exploring both ABS and other Government-held data sources to identify relevant, pre-existing and appropriate data sets that either match or closely align to the SDG Indicators. This work set the foundation for relevant Australian Government agencies to determine the most appropriate data source to use for reporting against each of the indicators.

As for most countries, identifying and presenting relevant datasets has proven challenging for Australia. These challenges have included:

* The diversity of potential data providers within the Australian Government;
* That data sets can often be spread across a number of Australian jurisdictions and are not necessarily aggregated at the federal level; and
* The number of SDG Indicators that have no, as yet, accepted methodology for collection (the Tier III Indicators).

In co-operation with agencies, ABS classified Australian data sources against the SDG Indicators using a 0 to 5 ranking system.

0: not rated

1: Indicator can be reported on in detail with existing data

2: Indicator can be reported on partially with existing data

3: Indicator cannot be reported on from existing data

4: Indicator may not be relevant to Australia

5: Further work needed to determine if the Indicator can be reported on.

***Step 2: Developing a methodology for publication***

Once datasets had been identified and categorised, agencies considered the appropriateness of publishing. A methodology was devised to ensure consistency of approach.

The methodology is:

1. The relevant custodian of the data must agree to the publication and must, therefore, have confidence in the data;
2. The Indicator must be a UN designated Tier I Indicator or a Tier II Indicator;[[1]](#footnote-1)
3. The Indicator must be able to be reported with existing, already publicly available data (i.e. it does not require new data to be produced however some data compilation may be required) and the data must be collated in accordance with the established methodology OR if it has not been collated according to the established methodology, it must include a caveat that clearly denotes any differences in method or definition used in its collation; and
4. “Regularly produced” is defined to mean the data is collected sufficiently regularly (i.e. at least every five years) using a consistent methodology and can therefore be used to create a time series.

***Step 3: Developing the Reporting Platform***

Agencies initially focused on preparing a statistical annex that would include Australian datasets against a select number of SDG Indicators. However, as data collection work proceeded, agencies agreed to establish a data platform that would house available Australian Government datasets on the SDG Indicators and also indicate the status of Australian data collection against all 232 SDG Indicators.

Agencies agreed to set up a platform similar in nature to respective data platforms for the UK and USA, using similar open source technology and running on a govCMS site. This model has been recommended by the UNECE Task Force on National Reporting Platforms.

The Reporting Platform is a whole-of-government initiative, funded by the Department of Foreign Affairs and Trade, produced by Australia’s Department of Environment and Energy, in close cooperation with ABS, and relies on data contributions from across all relevant government agencies. The responsibility for follow up and for completion of additional data sets lies with individual agencies.

Like the US and UK data platforms, each SDG Indicator is given a colour coding – green, orange, red or grey. The colour reflects the status of data that Australia holds.

* Green: Reported online
* Orange: Exploring data sources
* Red: Not currently reported
* Grey: Not applicable

As work progressed on identifying relevant datasets, designating a particular colour to a dataset often required a clarification. Agencies therefore developed and agreed on caveat sentences to apply to each choice in order to justify and explain the designation, improving the transparency of the process. These are explained on the following page.

As noted previously, not all 232 Indicators are considered relevant to Australia. The SDG Indicators that are colour coded Red reflect SDG Indicators that are not relevant to Australia and where the development of data sets is not seen as an efficient or effective use of resources. This is in keeping with the expectation and understanding of the UN Statistical Commission (UNSC) which, when adopting the SDG Indicators, noted that it is expected that countries will approach the SDG Indicators, and the associated work required around data analysis, identification and reporting, in line with their own national priorities and capabilities.

Disaggregation of datasets will be an ongoing challenge for Australia. An example of our work on this includes our support for the Washington Group on Disability Statistics, established under the UNSC. This multi-stakeholder group has developed a range of disability data tools including the Short Set of Questions on Disability and the UNICEF/Washington Group Module on Child Functioning. These tools have been tested extensively and when added to ongoing collections provide an efficient approach to monitor implementation of the *UN Convention on the Rights of Persons with Disabilities* and the SDGs by disaggregating data by disability status. Australia has provided financial support for this work.

Specifically relevant for the Australian context, the disaggregation of data based on Aboriginal or Torres Strait Islander identification is critically important, both for the development of tailored policy and programs and for the measurement of impact of those policies and programs on Aboriginal and Torres Strait Islander peoples. Australian agencies are requested to reflect disaggregation based on Aboriginal or Torres Strait Islander identification where datasets are already currently disaggregated. Going forward, increasing the number of data sets disaggregated by Aboriginal and Torres Strait Islander status will be a focus.

**Caveat choices for describing Indicator status**

When classifying an Indicator under one of the colour-coded categories, agencies must choose one of the corresponding sentences to explain the status of that Indicator in the Australian context.

**GREEN: Reported online**

1. Data follows the globally agreed methodology for this UN SDG Indicator and has been identified by the responsible agency as the most appropriate data source.
2. Data has been drawn from a national indicator or dataset and is an approximation of the UN SDG Indicator. We will work to develop an Australian dataset that meets the globally agreed methodology for this UN SDG Indicator.
3. Data has been drawn from a national indicator or dataset and is an approximation of the UN SDG Indicator. We intend to continue to report using this dataset.
4. Data has been sourced from the UN SDG database and has been verified or approved by the responsible agency.
5. While this is not a quantitative indicator, the responsible agency has identified the relevant policy/legislation appropriate for the Australian context.

**ORANGE: Exploring data sources**

1. A potential data source(s) has been identified however further analysis is needed to ensure the data are suitable for reporting and is comparable to the globally agreed methodology for this UN SDG Indicator.
2. Investigation into generating/identifying appropriate data for this UN SDG Indicator is currently underway.
3. While this is not a quantitative indicator, the responsible agency is currently exploring if there is any relevant policy/legislation appropriate for the Australian context.
4. Data is available on the UN SDG database but it has not been verified or approved by the responsible agency.

**RED: Not reported**

1. No suitable Australian data sources exist for this UN SDG Indicator.
2. This Indicator is not relevant to Australia.

GREY: Not applicable

1. The globally agreed methodology has not been set for this UN SDG Indicator therefore Australia has not yet investigated potential data sources.

***Step 4: Deploying the Reporting Platform***

The Reporting Platform is the Australian Government’s official reporting mechanism against the SDG Indicators. It provides a single point of access to anyone wishing to find out about the status of Australia’s data on each of the SDG Indicators.

It is expected that the Reporting Platform will be used across the UN reporting system. It will particularly assist UN-designated Indicator Custodians responsible for compiling country data. This reporting contributes to the UN Secretary-General’s annual report on progress towards the SDGs.

The Reporting Platform will also assist in streamlining reporting that is required for other purposes: the SDGs interact with a number of other policy and reporting instruments, both nationally and internationally, and a single Reporting Platform will help to minimise duplication of reporting efforts.

**Examples of links between the SDG Indicators and other reporting mechanisms**

**SDG1, SDG11 and SDG13**

**Sendai Framework on Disaster Risk Reduction**

The Sendai Framework reporting provides information on 11 SDG Indicators

* *Indicator 1.5.1 (which repeats at 11.5.1 and 13.1.1): Number of deaths, missing persons and persons affected by disaster per 100,000 people*
* *Indicator 1.5.2 (which repeats at 11.5.2): Direct disaster economic loss in relation to gross domestic product (GDP)*
* *Indicator 1.5.3 (which repeats at 11.b.1 and 13.1.2): Number of countries with national and local disaster risk reduction strategies*
* *Indicator 1.5.4 (which repeats at 11.b.2 and 13.1.3): Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030*

*Custodian agency: The UN Office for Disaster Risk Reduction*

The Sendai Framework on Disaster Risk Reduction (Sendai Framework) focuses on understanding disaster risk through the collection and sharing of disaster loss data. In February 2017, the UN General Assembly endorsed a set of 38 indicators (Sendai Indicators) to measure progress against the Sendai Framework’s seven global targets, which all UN Member States are expected to report against biennially. The Sendai Indicators provide a basic structure to record disaster losses and to understand progress over time. They also provide a mechanism to monitor disaster risk reduction policies, programs and initiatives to ensure that they are effective.

The Sendai Framework reporting provides information on 11 SDG Indicators. Rather than duplicating existing data collection efforts, the Australian Government will engage with the Australian Sendai Framework focal point, Emergency Management Australia within the Department of Home Affairs, to share data and ensure that it is nationally consistent.

Australia is working across the Commonwealth and states and territories to coordinate the collection of data and measure progress against the Sendai Indicators to prepare the first biennial national report in early 2019. The first step has involved identifying data that is consistently collected across Australia. The results of this work will inform the final national indicators that will feature in Australia’s reporting. This work is ongoing and remains a national priority.

**SDG15**

**Global Forest Resources Assessment under the UN Food and Agriculture Organisation**

Global Forest Resources Assessment under the Food and Agriculture Organisation links to two SDG Indicators

* *Indicator 15.1.1: Forest area as a proportion of total land area*
* *Indicator 15.2.1: Progress towards sustainable forest management*

*Custodian agency: Food and Agriculture Organisation*

Australia’s commitment to sustainable forest management (SFM) is articulated in its *National Forest Policy Statement*, which provides a vision and eleven national goals for the management of Australia’s forests. SFM encompasses the management of forests to maintain their full range of environmental, social and economic values. SFM is supported by both domestic and international monitoring and reporting processes.

Australia is a member of the Montréal Process Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests and has adopted the common framework of criteria that describe the broad forest values that society seeks to maintain, and the indicators which provide measures of change in these criteria over time. This allows for reporting of progress towards SFM at the national level, a shared understanding of purpose, and harmonisation between local, regional, national and international reporting processes.

*Australia’s State of the Forests Report 2018* will be released in the second half of 2018. This report will align with the FAO’s Global Forest Resources Assessment (FRA). Through the FRA reporting mechanisms, Australia already reports on the requirements of SDG Indicators 15.1.1 and 15.2.1, including its five sub-indicators.

In April 2017, the UN General Assembly adopted the first ever *United Nations Strategic Plan for Forests 2017-2030*. The plan includes six Global Forest Goals (GFGs) to support the sustainable management of the world’s forests and the achievement of the forest-related SDGs. All UN Member States are expected to report against the GFGs, starting from 2019. Australia will prepare its Voluntary National Report for the GFGs in the second half of 2019.

**Applying Australian data innovations to the SDGs**

Increasingly, decision-makers are turning to innovative data solutions to inform their considerations of performance against the SDGs at the Goal, Target and Indicator level. Australia is at the forefront of designing and deploying innovative solutions, like the application of big data, to capture and analyse SDG-relevant data.

Examples of data solutions driven by Australian innovation include the application of Earth observation data, through Digital Earth Australia, the Open Data Cube and transportation metrics.

Australia is also a leader when it comes to using data to monitor performance. In addition to the SDGs Reporting Platform, the Australian Government, through Data61, has developed several performance dashboards to track performance against certain indicators. Examples include the previously-mentioned Australia’s National Cities Performance Framework and the Council of Australian Governments Performance Dashboard.

**Examples of Australian reporting innovation: performance dashboards and digitalisation**

**Council of Australian Governments (COAG)** **Performance Dashboard**

COAG is the peak intergovernmental forum in Australia, and is responsible for managing matters of national significance or matters requiring coordinated action by all Australian governments at the federal and state and territory level. The COAG Performance Dashboard provides a single, streamlined source of information on progress toward commitments made at COAG meetings between Commonwealth, State and Territory governments. The Dashboard covers healthcare, education, disability, water, transport, infrastructure and housing. The Dashboard assesses progress at the national level and for each State and Territory. It uses a ‘traffic light’ system to highlight performance against the defined benchmarks.

Efforts to digitalise data and reporting are increasing. The most recent *State of Environment Report (2016)*, an independent report commissioned by the Australian Government every five years, is an example of the publication of data through an innovative new platform.

**State of Environment Digital 2016**

State of Environment Digital presents over 300 graphs and maps linked to the State of Environment Report. Most of the graphs are interactive, users can turn variables on or off and change views, and graphs can be download as an image or raw data, accessed from the Australian Government open data portal. The spatial data uses Australia’s NationalMap tool, which provides easy access to authoritative geospatial data and facilitates links to other spatial datasets. The report also contains content from the previous State of Environment Report, allowing for comparisons. The report has been recognised for its innovative approach to reporting, winning the 2017 Acquia Engage Award, (Public Sector Category) and was a Finalist in the 2017 Public Sector Innovation Awards.

**Innovation in Earth observation data**

*“[Earth Observation] data have the real potential of forming a new and emerging ‘data ecosystem’ for development, in which integrated information systems that are comprehensive and coordinated are able to monitor the state of the Earth, people and planet, and to deliver timely information necessary to citizens, organisations and governments to build accountability and make good, evidenced-based decisions from local to global levels.”*

Greg Scott, United Nations Statistics Division in the Committee on Earth Observation Satellites 2018 *Earth Observation Handbook Special Edition on the Sustainable Development Goals"*

Australia is a world leader on the collection of Earth Observation (EO) data for driving sustainable development. EO data is collected from a range of sources, including: satellite imagery, national location information data sets, global observatory networks and citizens using mobile phones. This data assists in understanding how environments are changing and is also useful for predicting the impact of certain interventions. Harnessing the power of EO data, especially ‘big data’, about our built and natural environment to assist with achieving the SDGs, or to track performance against the SDGs, is increasingly recognised as an important tool.

**Digital Earth Australia**

Digital Earth Australia (DEA) is world-leading digital infrastructure that uses images and information recorded by satellites to detect physical changes across Australia in unprecedented detail. It identifies soil and coastal erosion, crop growth, water quality and changes to cities and regions. Led by Geoscience Australia, DEA translates decades of satellite data into information - including tools and continental scale maps - and insights into Australia’s land and oceans. Historical data can be combined with data from an ever-growing range of new satellites to provide weekly updates for the entire country. DEA is being used or piloted for SDG Targets on land cover, forest monitoring, land degradation and water quality.

**Australia’s Open Data Cube**

DEA is the world’s first continental scale implementation of the open source software, the Open Data Cube (ODC). This software was pioneered by Geoscience Australia, CSIRO and Australia’s National Computation Facility to drive innovation and better natural resource management in Australia. It has attracted a growing global user base and is now being co-developed by international partners such as the United Kingdom’s Space Catapult, United States Geological Survey, the Committee on Earth Observation Satellites (CEOS) and Analytical Mechanics Associates. ODC enables countries from around the world to take freely available Earth observation data and easily use this data to measure and drive progress against a range of SDGs.

**Using Earth Observation data**

Applying free and open satellite data to environmental, economic and social challenges has the potential to deliver information and applications that have great impact at local, regional and global scales. Free and open satellite data, advances in cloud computing, combined with innovative open-source technologies such as the ODC, mean that developing countries without the local infrastructure to process large volumes of satellite data can access data and computing power to build relevant applications and inform decision making.

For example, the ODC is used or piloted in:

* Colombia for forest monitoring;
* Vietnam for water quality; and
* Samoa where CSIRO is leading the adaptation of existing algorithms to calculate SDG Indicators, specifically 15.3.1.

In addition to these country specific examples, a consortium of partners including CEOS, the Group on Earth Observations, the Global Partnership for Sustainable Development Data, Amazon Web Services, Strathmore University in Kenya and the Office of the Deputy President, Kenya have launched the Africa Regional Data Cube (ARDC). This exciting regional initiative is using the ODC to help Kenya, Senegal, Sierra Leone, Ghana and Tanzania address food security as well as issues relating to agriculture, deforestation and water access.

**Remote Sensing for Water Quality Monitoring of the Great Barrier Reef**

Remote sensing works by using remotely sensed ocean-colour information from NASA’s Aqua satellite, which orbits Earth approximately every 100 minutes, carrying the Moderate Resolution Imaging Spectroradiometer (MODIS) remote-sensing instrument. MODIS is a sensor that measures the reflected sunlight from the earth’s surface in 36 spectral bands, of which nine are primarily used to sample ocean colour. The process is similar to digital photography, except that the sensor responds to a much broader spectrum than that of visible light. Each of the spectral bands captures the energy of the reflected light within the small window of a few nanometres (one billionth of a metre). CSIRO identified the methodology by coupling of two physics-based inversion algorithms: one addressing the atmospheric correction and air-water interface; the other the in-water constituent retrieval.



This image is a Digital Earth Australia Water Observations from Space (WOfS) product. WOfS shows how often surface water has been detected from satellite observations over all of Australia since 1986. It is continually updated as new satellite imagery becomes available to analyse. WOfS is coloured to show the difference in water detection through time. Red areas are those where water has been observed rarely, and is indicative of flood events. Yellow and green areas indicate those areas without regular water, such as intermittent water bodies. Blue and purple areas are those that are usually wet, such as permanent water bodies and the sea. This image shows how WOfS works across the whole Australian continent, indicating the sparsity of permanent water, and the extent of the major floods over the last 30 years.

**Innovation in Infrastructure data**

**National Infrastructure Data Collection and Dissemination Plan**

The Bureau of Infrastructure, Transport and Regional Economics (BITRE), under the Australian Department of Infrastructure, Regional Development and Cities, has developed a National Infrastructure Data Collection and Dissemination Plan (Data Plan), with assistance from an expert Steering Group comprising transport, infrastructure and data experts from the private and public sector.

The Data Plan improves and coordinates information and data collection across key transport and infrastructure stakeholders. It will also provide improved and more timely information for infrastructure investment decisions and monitoring the performance of Australia's infrastructure networks. A key part of the Data Plan is developing projects that utilise new and emerging data sources, including big data, to improve understanding of issues facing the infrastructure sector.

One example is a project using GPS data shared by freight operators to better understand where congestion is impacting freight movements. This project is being led by BITRE and the data collected can be used by industry and policy makers to support more effective road freight across Australia.

The projects proposed in the Data Plan build on existing datasets, which form the basis of Indicator 9.1.2. The new projects will help to achieve Target 9.1 by facilitating the development of quality infrastructure.

**SDG9**

**Tracking passenger and freight volumes by mode of transport**

*SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation*

*Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all*

*Indicator 9.1.2 Passenger and freight volumes, by mode of transport*

**Transport Network Strategic Investment Tool**

The Transport Network Strategic Investment Tool (TraNSIT), developed by CSIRO, is a modeling tool that provides an evidence-based approach to identify infrastructure investment priorities, improve transport efficiency and reduce logistics costs.

TraNSIT has been applied to all Australian agricultural and forestry commodities, representing more than five million vehicles and 10,000 rail trips per annum. In Australia it is used to:

* prioritise transport-related logistics investments;
* prioritise $100 million of Government investment in roads across northern Australia; and
* plan improvements to rail/road storage, access to ports and to reduce bottlenecks to livestock export.

TraNSIT has also been used to establish the evidence base for maximising the benefits of the Melbourne-Brisbane Inland Railway (Inland Rail).

TraNSIT’s benefits include:

* improving transportation aspects by:

analysing the impact of road upgrades such as sealing, bridge upgrades, axel load upgrades;

analysing first/last mile improvements to processing, storage and ports; and

testing regulatory changes such road pricing and tolls.

* reducing logistics costs by:

analysing storage or centralised warehousing to optimise use of different vehicle sizes;

analysing impacts of vehicle improvements or new trucking fleets;

optimising supply chains for state owned enterprises from farms to processing, storage and markets; and

identifying solutions to logistical bottlenecks between paddock and market for remote small scale farmers.

**Application of TraNSIT in Indonesia**

Transport infrastructure is essential for moving produce from 57 million hectares of Indonesian agricultural and horticultural land annually. Sea and land transport distances can be extensive, often with hundreds of kilometres from the farm to the table. Targeted investment in infrastructure and strategic regulatory changes can significantly reduce logistics costs across the supply chain. Understanding the impact of changes to supply chain flows and transport costs across all enterprises will be critical to optimising value from the investment options available.

TraNSIT is being tested in Indonesia, with initial case studies in cattle, rice and sugar. TraNSIT utilises best available data on agriculture production (tonnes and area) within each province or district, supply chain paths and the road/shipping network. Over the next 3-5 years, TraNSIT will extend to a broader range of commodities. The figure below highlights some of the components of TraNSIT Indonesia.



**Data partnerships**

***Assistance to partner governments***

The 2030 Agenda reaffirms countries’ responsibility and leadership of their own development and Australia, through its aid program, is already assisting partner governments with implementation. This includes providing assistance with SDG reporting and data collection.

As a member of the Pacific Islands Forum, Australia has supported the development of the Pacific Roadmap for Sustainable Development for implementation, monitoring and reporting on the SDGs. We have worked with the Secretariat of the Pacific Community (SPC) and the Pacific Statistics Steering Committee to agree on a subset of 127 SDG Indicators that are appropriate for the Pacific. The Pacific indicators include an additional five regional indicators that are tailored to Pacific countries’ development contexts.

Australia’s funding to the UN Development Program’s Pacific Office has supported technical assistance and other data and statistics work in the Pacific.

Other Australian assistance on data and statistics has included:

* supporting the Pacific Community’s Statistics for Development Division’s implementation of a Ten-Year Pacific Statistics Strategy;
* assisting the Pacific Community’s Regional Methods Board to set standards to assist with improving the efficiency and consistency of major statistics collections in the region; and
* supporting five long-term partnerships to provide technical assistance and statistical leadership support across economic, social, environmental and governance statistics to National Statistics Offices in Indonesia, Timor-Leste, Papua New Guinea, Fiji and the Pacific region.

In the Indo-Pacific, Australia contributes funding to the UN Development Program’s Asia-Pacific Development Effectiveness Facility, which is assisting countries better map, manage and target all financial flows to national sustainable development priorities. The ABS participates in the UN Economic and Social Commission for Asia and the Pacific’s Regional Steering Group on Population and Social Statistics and has been involved in consultations to develop a regional work plan that includes strategies to increase user engagement and to strengthen data disaggregation in SDG Indicator frameworks. CSIRO provides policy advice and capacity building as part of its engagement with the UN Centre for Regional Development Regional 3R Forum for Asia and the Pacific and in several projects for the UN Environment Program’s Bangkok office.

*See Annex for information on Pacific and Indo-Pacific adoption of the 2030 Agenda.*

***Individual Deprivation Measure: a new way of measuring poverty***



The Australian Government is working in partnership with the Australian National University and the International Women’s Development Agency to deliver the Individual Deprivation Measure (IDM). This gender-sensitive and multidimensional measure assesses deprivation at the individual level, in relation to 15 dimensions of life, making it possible to see who is poor, in what way and to what extent.

The IDM is helping to overcome the current limitations of poverty data by getting below the household level to provide individual-level assessment of deprivation. By enabling disaggregation of data, and measuring what poor women and men say defines poverty, the IDM helps build a gender-sensitive, nuanced, intersectional picture of deprivation, which can help governments and organisations to tackle poverty more effectively through better targeting of policy and programming. Individual level, gender-sensitive, multidimensional measurement is critical to tracking global progress towards the SDGs, and understanding how development efforts are contributing to ‘leaving no one behind’. The IDM aligns with some 25 per cent of the 53 gender-related SDG indicators. It can also provide disaggregated data for some SDG Indicators where this is not specifically required, consistent with the call for disaggregated data wherever possible.

Following early use in Fiji, the IDM is being further developed through studies in up to five countries to ready it for global use by 2020.

***Collaboration with other data providers***

Collaboration with other data providers and collecting datasets against the SDG Indicators is also important. Bringing in multiple data sources can be useful to highlight Australia’s performance on the Goals and Targets, across space and time, not just at the SDG Indicator level. Referring to data from multiple sources can also assist in identifying connections, overlaps and interactions between the SDGs.

***The Australian National Development Index (ANDI)***

The Australian National Development Index (ANDI) is a civil society and research collaboration, incorporated as a not-for-profit company. It has over 60 partners, many of them national peak organisations, representing a broad range of interest groups, including welfare, environmental, trade union, business, academic, ethnic, religious, indigenous, youth and children’s, local government and human rights organisations. ANDI’s broad aim is to establish a set of goals and measures for Australia's progress ‘beyond GDP’, which represent a clearer, more considered and holistic vision of the future and are based on an inclusive national community engagement process and extensive national research. ANDI will produce an annual index of overall national wellbeing, and twelve separate indices and status reports in key component ‘domains’ of progress. The indices are:

|  |  |
| --- | --- |
| Children and youth wellbeing  | Environment and sustainability |
| Communities and regions | Health |
| Culture, recreation and leisure | Indigenous wellbeing |
| Democracy and governance | Justice and fairness |
| Economic life and prosperity | Subjective wellbeing |
| Education and creativity | Work and work life |

***Australian Urban Research Infrastructure Network***

The Australian Urban Research Infrastructure Network (AURIN), is an Australian Government-funded data project, set up to enable a common platform for urban data for research and policy purposes. Through the AURIN portal, AURIN Map, and an open Application Programming Interface (API), there is access to over 3,500 datasets from 90 different sources. AURIN is now working to align its data work plan with the SDGs and classifying datasets as SDG relevant within its metadata catalogue (<https://data.aurin.org.au/group>).

***Transforming Australia Project***

The National Sustainable Development Council (NSDC) is a collaborative, multi stakeholder, non-government body that brings together experts across a range of disciplines relevant to the SDGs and draws on member experience across government, business, research and civil society. The NSDC is running the Transforming Australia project. This project has produced a baseline report assessing how Australia is progressing against each of the SDGs. The project has collected data and evidence from a range of sources on each of the SDGs. It is not seeking to produce data against all of the SDG Indicators. Instead, it is looking at the Goals and Targets and then identifying relevant data sets to measure progress. The data and evidence are then analysed by experts who provide an interpretation and explanation of the data. This information is then used to indicate how Australia is progressing towards achieving each of the Goals (data trend), with the aim of identifying areas of priority.

**Annex**

***Pacific Island countries’ regional approach to monitoring the SDGs***

The Pacific Islands Forum (PIF) Secretariat established a Regional SDGs Taskforce in 2016 to develop a Pacific Regional Roadmap for Sustainable Development (Roadmap) for implementation, monitoring and reporting on the SDGs. The Roadmap was adopted by leaders, including Australia, at the PIF meeting in September 2017. The Roadmap will ‘guide and consolidate the region’s efforts to implement and monitor the 2030 Agenda and the Sustainable Development Goals, the SAMOA Pathway and the Framework for Pacific Regionalism.’ The Pacific SDG Taskforce has overall coordination responsibility for the implementation of the Roadmap.

The Secretariat of the Pacific Community (SPC) and the Pacific Statistics Steering Committee, have developed a Pacific set of sustainable development indicators. A sub-set of 127 of the 244 SDG Indicators have been agreed, along with five regional indicators tailored to Pacific countries’ development contexts. The SPC has prepared a draft 5-year data collection plan to enable monitoring of 46 agreed Pacific SDG indicators.

Commencing in 2018, the PIF will produce a four-yearly Pacific report on sustainable development. The report will ‘clearly communicate the Pacific’s evolving story on sustainable development by providing a measure of progress on collective regional actions and the partnerships intended to support them.’ This report will be presented for Pacific Leaders’ consideration in August 2018, and will be presented to the High Level Political Forum (HLPF) on Sustainable Development in 2019.

***Indo-Pacific regional approach to monitoring the SDGs***

At the 73rd session of the United Nations Economic and Social Commission for Asia and Pacific (UNESCAP) in May 2017, Asia-Pacific governments endorsed a Regional Road Map for Implementing the 2030 Agenda for Sustainable Development in Asia and the Pacific. The Regional Road Map includes priority areas (including social development, disaster risk reduction, climate change, management of natural resources, connectivity and energy), implementation arrangements (with a focus on regional level cooperation), and a process to track progress on the SDGs.

UNESCAP has also released an Asia-Pacific SDG Data Portal and an outlook assessment on SDGs in the Asia-Pacific region. The portal contains up-to-date data on the SDG Indicators. The outlook report provides a Goal-by-Goal snapshot of progress, including bright spots, hot spots and emerging issues for the region as it implements the 2030 Agenda.In February 2018, UNESCAP released its 2017 statistical yearbook for Asia and the Pacific.The Data Portal and outlook assessment provide useful tools for the region in assessing progress towards the 2030 Agenda.

**References (List of relevant websites and references)**

|  |  |
| --- | --- |
| Description | Link |
| ANDI | Australian National Development Index |
| AURIN | https://data.aurin.org.au/group |
| Australia State of Environment Report 2016 | https://soe.environment.gov.au/ |
| Australian Government data platform  | sdgdata.gov.au |
| Australian Government Productivity Commission Performance Dashboard | https://performancedashboard.d61.io/aus |
| Data61 | https://data61.csiro.au/ |
| DFAT website  | http://dfat.gov.au/aid/topics/development-issues/2030-agenda/Pages/default.aspx |
| Digital Earth Australia | http://www.ga.gov.au/about/projects/geographic/digital-earth-australia |
| Global Forest Resources Assessment  | http://www.fao.org/forest-resources-assessment/en/ |
| Global Material Flow Database | http://www.resourcepanel.org/global-material-flows-database |
| Good Practice Guidance Report on land degradation methodology | <https://www.unccd.int/sites/default/files/relevant-links/2017-10/Good%20Practice%20Guidance_SDG%20Indicator>%2015.3.1\_ Version%201.0.pdf |
| Individual Deprivation Measure | http://www.individualdeprivationmeasure.org/ |
| MODIS | https://terra.nasa.gov/about/terra-instruments/modis |
| Montreal Process Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests | https://www.montrealprocess.org/Resources/ Criteria\_and\_Indicators/index.shtml |
| National Cities Performance Framework Dashboard | https://smart-cities.dashboard.gov.au/all-cities/overview |
| National Forest Policy Statement | http://www.agriculture.gov.au/forestry/policies/forest-policy-statement |
| National Infrastructure Data Collection and Dissemination Plan | https://bitre.gov.au/data\_dissemination/index.aspx |
| National Map | https://nationalmap.gov.au/ |
| Open Data Cube | https://www.opendatacube.org/ |
| Satellite Earth Observations in support of the SDGs, The CEOS Earth Observation Handbook Special 2018 Edition | http://eohandbook.com/sdg/ |
| SDG Transforming Australia Project | https://www.sdgtransformingaustralia.com/ |
| Sendai Framework for Disaster Risk Reduction  | https://www.unisdr.org/we/coordinate/sendai-framework |
| The Australian SDG website  | www.sdgs.org.au |
| Transport Network Strategic Investment Tool | https://www.csiro.au/en/Research/LWF/Areas/Landscape-management/Livestock-logistics/TRANSIT |
| UN Convention on the Rights of Persons with Disabilities | https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html |
| UN Statistical Commission SDG website | https://unstats.un.org/sdgs/ |
| United Nations Strategic Plan for Forests 2017-2030 | http://www.un.org/esa/forests/documents/un-strategic-plan-for-forests-2030/index.html |
| United Nations Sustainable Development Goals homepage | https://sustainabledevelopment.un.org/sdgs |
| Washington Group on Disability Statistics | http://www.washingtongroup-disability.com/ |

1. With the exception of 8.4.1/12.2.1 which is currently a Tier III indicator but Australia’s data has been sourced from the Global Material Flows Database as per the methodology. [↑](#footnote-ref-1)