

FEA Australian Urban Systems Transformation Initiative
A National Strategy for Sustainable Development of Cities and Communities
Background Briefing and Issues Note

1. A National Strategy for Sustainable Development of Cities and Communities

Future Earth Australia (FEA) is co-developing a National Strategy for Sustainable Development of Cities and Communities, working with stakeholders from all sectors (government, practitioners, private sector, NGOs, communities and researchers) and levels (national, state/territory, metropolitan/regional, local). FEA was founded by the Australian Council of Learned Academies and is hosted by the Australian Academy of Science. It leads the Australian and Oceanic activities of Future Earth internationally, and has recently been appointed joint leader of Future Earth's global Urban Knowledge Action Network.

In 2018, based on preliminary framing work conducted by a group of [Australian researchers and urban stakeholders](#), FEA adopted Australian Urban Systems Transformation as a priority initiative. An [initial workshop in May 2018](#), with participants from around Australia, agreed that the first step should be co-development of a National Strategy by June 2019, to address urban challenges and opportunities, including underpinning knowledge development and use.

The process, overseen by a [reference group](#), has commenced and includes inputs from multi-stakeholder workshops around Australia, interviews, and public submissions. The strategy needs to be relevant across all sectors and at all spatial scales - local to national and international – and to regional settlements as well as capital cities. All are both contributors to and audiences for the strategy, whilst recognizing the special leverage of federal and state/territory governments. The aims are congruent with the recent House of Representatives report on urban development: “Our major cities and our regions have one future – they will depend on each other for their prosperity, sustainability and liveability – and planning for this future needs to be done in an integrated and holistic way ...” [Building up and moving out, House of Representatives Inquiry, 2018]

2. Australian urban challenges and opportunities and transformational responses

Australia has many systemic urban challenges. It is one of the most urbanised countries in the world with 89% of the population living in urban areas. Notwithstanding high ‘liveability’ ratings of the major cities, current and emerging issues for Australia include the continuing growth in population (e.g. Sydney and Melbourne both projected to double in population to over 8m people by 2061); ageing and inadequate infrastructure; continuing urban sprawl; some moves towards increased density but often not people and place oriented; work locations distant from home; limited public transport investment; growing traffic congestion; decreasing housing affordability; people and infrastructure vulnerabilities to climate change; and ageing and socially disadvantaged communities with growing inequalities. Australia also has one of the highest per capita resource footprints and greenhouse gas emissions in the world. Its urban growth, consumption and production patterns impact on local, regional and global resource extraction, emissions, waste, biodiversity and ecosystems. At the same time there are many economic, social and technology changes (e.g. digitalisation, energy, materials and transport technologies) which can present urban opportunities as well as risks.

The National Strategy will address the transformational responses to these challenges and opportunities. It will look toward 2030 and beyond but also outline specific actions starting now.

3. Developing a National Strategy

To be successful, transformational strategies need to include **shared urban visions** of feasible and desirable futures; **collaborative and aligned urban governance** integrated across systems, sectors and scales; **effective stakeholder and community engagement** across multiple goals and diverse values; and **co-produced knowledge development and use** by decision makers; all supported by continuing learning and adaptive management.

3.1 A systems view of Australian urban visions, goals and indicators

There is currently a lack of broadly shared visioning of urban futures. National and local urban visioning can connect shared high-level values and individual city visions, providing a unifying purpose for collaborative action. It can also help the translation of broader sustainable development goals (such as the 2030 UN SDGs) into national, metropolitan and local urban goals, and key indicators of success.

Cities and communities are made up of dynamic and interrelated social, economic, environmental and technical systems. It is essential that interdependencies (synergies and trade-offs) between goals, strategies and indicators, are well understood, including across spatial and temporal scales. This can also clarify the many benefits to Australia of sustainable urban development – productivity and innovation, liveability and health, social justice, environmental sustainability, resilience to shocks and systemic changes, and enhanced international connection, contribution and reputation.

3.2 Collaborative urban governance and decision-making, on high leverage issues

Urban institutional and governance arrangements are generally highly fragmented, with siloed and narrow issues framing, knowledge commissioning, and decision-making. This and power imbalances, tensions and changes leads to a lack of coherent and consistent policies and decision-making across sectors and levels. There are also often significant gaps between stated metropolitan goals and plans, and actual implementation, a result of multiple and conflicting drivers of actual decisions.

Institutional innovation, including a move towards more collaborative and aligned policy and decision-making across sectors and levels, can help address these issues. This can also identify more systemic leverage issues, solutions and synergies, and broader cost-benefit analyses, including non-monetised benefits and costs. High leverage opportunities can include broader scale strategic investments, but also local innovations and experiments, with the potential for scaling out and up.

3.3 Effective stakeholder and community engagement and influence

Many stakeholders and local communities feel disengaged from urban planning and development processes, and are unhappy with outcomes on the ground. More effective engagement between sectors, institutions, communities and disciplines, with an overall shift from communication/consultation to collaboration and in some cases empowerment, could assist in shared visioning, broader framing of urban issues and proposals, and the incorporation of multiple and diverse values into assessments, policies and decisions. The development of multi-interest knowledge-action networks at all levels, and communities of practice could facilitate such changes.

3.2 Australian urban knowledge development, gaps and uptake issues

Australia has world leading research capability in many urban areas. However some critical challenges have already been identified in knowledge availability and use (e.g. lack of an urban systems view/integrated 'science of cities'; knowledge gaps especially at broader spatial scales – precinct to metropolitan to region - and across sectors; the need for multi-scale integrated systems modelling and visualisation; availability of underpinning data and information; fragmentation of knowledge and uptake and usage issues at all scales and levels).

To have value, knowledge must be relevant, credible, integrated, accessible and applied. Urban stakeholders are all both knowledge providers and knowledge users (i.e. Government (national, state and local); practitioners (planners, engineers, architects, consultants etc); NGOs; communities; businesses; and researchers). This means respecting and incorporating many forms and sources of knowledge. An emphasis on co-produced knowledge would support improved issue framing, as well as knowledge commissioning, development and sharing. Broader framing of urban issues often identifies significantly greater benefits, as well as being necessary to assess trade-offs.

Going forward, one possibility is to co-develop an overarching but flexible urban research and innovation agenda for Australia, to confirm priority knowledge needs and gaps, and help shape funding priorities for a future portfolio of programs and both shorter and longer term initiatives. This could help address fragmented and inconsistent funding, recognise the value of various research funding and business models, and provide a better understanding of the overall benefits and costs of enhanced urban knowledge development and use.

There is also the need to improve synthesis, sharing and translation of *existing* knowledge for decision makers, so that users can better apply what is already available. This may require shared knowledge platforms, but also has implications for enhanced people and institutional capabilities (for knowledge providers and users), and for continuing learning and best practices to be reflected in policy and decision-making.

All the above would be further enhanced by links to international urban experience, knowledge-action networks and capabilities, and growing opportunities to participate in international programs.

4. Submissions to the National Strategy development process

Future Earth Australia welcomes submissions from government, practitioners, industry, the private sector, NGOs, civil society and academia on our 'Urban Systems Transformation for Sustainable Development Outcomes' consultation process. Your submission will inform our collective strategy due for publication in June 2019.

We are looking for submissions that engage with one or more of the following themes:

- a) Developing shared urban visions, goals and indicators;
- b) Collaborative governance and decision-making;
- c) Identification of high leverage urban transformation issues and opportunities
- d) More effective stakeholder and community engagement and influence;
- e) Co-produced knowledge development, usage and learning;
- f) Identification of high priority knowledge gaps, issues and opportunities; and
- g) Other elements of an urban vision and strategy for Australia.

Your input may be drawn from, or relevant to, any spatial scale (from local to international). Actual case studies or examples are also of particular interest.

Submissions should be a maximum of 5 pages, size 12 font, 2.5cm margins. If your submission wishes to include a case study or studies in support, please attached these to your submission as an appendix. Please also include your organisation details, and a contact person who we may contact about your submission.