



The Sustainability Institute is African thought leadership institute researching, teaching and practicing social innovation for the transition to just and generative futures.

As a research and learning institute with a deep understanding of sustainability, we do value-aligned consulting work for clients in various sectors. Our network of alumni researchers stretches across disciplines to bring a diverse skillset to each project.

Depending on the scope of the project a transdisciplinary team is formed to add optimal value to the research questions. Collected here is the work we've done for a variety of clients both in South Africa and beyond.

INTERNATIONAL RESOURCE PANEL  
*City-level decoupling: Urban resource flows and the governance of infrastructure transitions*

This report applied the concept of decoupling to the urbanisation challenge, looking at the role of cities in a transition toward sustainability by investing in infrastructure that supports decoupling. Theoretical arguments were complemented by 30 case studies from around the world that demonstrate the concept of decoupling at the city scale. The project ran over two years, and involved the coordination of over 30 authors.

Focus area: Sustainable cities  
 Spatial scope: Global  
 SI team: Mark Swilling and Blake Robinson



STELLENBOSCH MUNICIPALITY  
*Spatial development framework for Stellenbosch*

Following on from a project we undertook in 2012 to summarise the SDF for Stellenbosch Municipality, we were approached to develop a new SDF focused on the town of Stellenbosch in an innovative manner that would embed sustainability into the town's future plans. We used decision-making software to capture insights from local experts to develop scenarios and priorities for the town, and invited the public to contribute their ideas for improving pockets of Stellenbosch via a website.

Focus area: Sustainable infrastructure  
 Spatial scope: Local  
 SI team: Mark Swilling, Blake Robinson, Megan Davies



## UN ENVIRONMENT

### *Green economy toolkit for the sub-national level governments in Africa*

The toolkit aims to assist sub-national levels of government to translate national green economy strategies into local plans and action. It looks at key sectors of relevance to the African context, as well as more general planning principles and approaches. The toolkit was trailed with experts from Ghana, Ethiopia, Kenya, Rwanda and Mozambique. An interactive version of the toolkit will allow easy navigation.

Focus area: Green economy  
Spatial scope: Regional  
SI team: Blake Robinson

## UN-HABITAT

### *Urban patterns for a green economy: Quick guides*

UN-Habitat asked us to assemble a series of short booklets to educate city decision makers on the latest concepts in urban sustainability, in order to encourage them to contribute toward greener economies. The booklets focused on urban infrastructure, density, ecosystem services and urban competitiveness, and included case studies from around the world to inspire innovative approaches.

Focus area: Sustainable Cities  
Spatial scope: Global  
SI team: Mark Swilling and Blake Robinson



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## NEDBANK

### *Smart living guide*

As part of a multi-year project with Nedbank aimed at introducing sustainability principles into their home loans business, we developed guides for sustainable living aimed at middle to high income South African homeowners. The guides provide a range of interventions from behavioural changes to more expensive investments in new technologies that help homeowners to save resources and money.

Focus area: Sustainable infrastructure  
Spatial scope: National  
SI team: Blake Robinson and Natalie Mayer

## GI-REC

### *Promoting urban metabolism for resource efficient cities*

This ongoing collaboration with UNEP started with a comprehensive review of the approaches to assessing urban metabolisms and green city indicator sets. This led to the development of a draft toolkit for urban practitioners in the developing world. This was further refined in collaboration with city representatives from Southeast Asia, Latin America and Africa, and UNEP's partner institutions. The most recent phase of work involved the development of a communications strategy, with a video explaining the concept of urban metabolism.

Focus area: Sustainable infrastructure  
Spatial scope: Global  
SI team: Blake Robinson, Josephine Musango, Paul Currie



DEPARTMENT OF ENVIRONMENTAL  
AFFAIRS AND TOURISM

*Green economy modelling report for South  
Africa*

This report assessed potential opportunities to promote a green economy, with a focus on key economic sectors as set out by the National Development Plan: Vision 2030. A modelling exercise compared scenarios of investments directed to business-as-usual, with scenarios allocated to four critical sectors to a green economy: energy, agriculture, transport and natural resource management. The findings showed that smarter natural resource management is key for sustained economic development and societal well-being.

Focus area: Green economy

Spatial scope: National

SI team: Mark Swilling and Blake Robinson



INTERNATIONAL RESOURCE PANEL

*Weight of cities: Resource requirements of  
future urbanisation*

This project looks at the resource requirements of projected urbanisation to 2050. It includes an estimation of the amounts of various resources required to accommodate the anticipated urban resource; Life Cycle Assessments of alternative/sustainable technologies and systems to estimate how they could reduce overall resource impact; an assessment of how urban morphology can reduce resource requirements; and case studies of cities pursuing integrated infrastructure planning to optimise resource use.

Focus area: Sustainable Cities

Spatial scope: Global

SI team: Mark Swilling, Blake Robinson, Josephine Musango, Paul Currie



UK DEPARTMENT FOR INTERNATIONAL  
DEVELOPMENT

*Mitigating risks and vulnerabilities in the Food-  
Energy-Water nexus in developing countries*

This report analyses global nexus interconnections (such as the dependence of food systems on energy at every stage of the food value chain) and identifies key drivers, which include economic and population growth, resource depletion, environmental degradation, climate change and globalisation. The study also analysed the nexus in three case study countries (Malawi, South Africa and Cuba), which represent different levels and types of economic development and 'socio-metabolic regimes'.

Focus area: Sustainable cities

Spatial scope: Regional

SI team: Jeremy Wakeford, Candice Kelly, Sasha Lagrange, Blake Robinson

UK DEPARTMENT FOR INTERNATIONAL  
DEVELOPMENT

*The Energy-Food-Water nexus in Kenya: A  
case study*

Kenya, a lower-middle-income 'frontier economy', represents an interesting and useful case study of the energy-food-water nexus that complements the existing three cases of Malawi, South Africa and Cuba. The country has been a leader in Africa in the development of renewable energy, particularly geothermal power and roof-top solar PV. However, following discoveries of oil resources in recent years, Kenya is poised to begin oil production in 2017. This could have a major impact on the development trajectory the country follows in the coming decades.

Focus area: Sustainable cities

Spatial scope: Regional

SI team: Jeremy Wakeford and Blake Robinson

UK DEPARTMENT FOR  
INTERNATIONAL DEVELOPMENT  
*Oil shock mitigation strategies for developing  
countries*

This report analysed the key socioeconomic vulnerabilities to and likely impact of oil price and supply shocks on developing countries, and recommended a broad set of mitigation strategies and policies for ameliorating these impacts. The areas covered included the energy system, transport, agriculture, macro-economy and socioeconomic welfare. The report included detailed oil shock vulnerability assessment case studies on Malawi, Nigeria, South Africa and India.

Focus area: Oil shock mitigation  
Spatial scope: Regional  
SI team: Jeremy Wakeford, Martin de Wit,  
Sumetee Pahwa-Gajjar, Blake Robinson

ERNST & YOUNG  
*Research series: Sustainable food systems*

Ernst & Young commissioned the SI to produce a series of four research papers on food systems for their clients and other private sector actors who want to understand how to engage in African food systems.

I: A sustainability review of the global food system. II: Making sense of undernutrition and overconsumption: Agenda-setting for sustainability in the South African food sector. III: 1913 Land Act: The state of South African land ownership 100 years on. IV: Consolidation in the food system: Risks, opportunities and responsibilities.

Focus area: Sustainable food systems  
Spatial scope: Global  
SI team: Luke Metelerkamp



SOUTHERN AFRICA FOOD LAB  
*Smallholder farmers and organic agriculture  
in South Africa*

The SI was asked to provide a desktop review on the status of smallholder farmers within the organic sector in South Africa. This consisted of sourcing, analysing and reviewing existing academic and grey literature on the organic sector in South Africa, as well as the role of and impact on smallholder farmers. The report was peer reviewed by three academics, and the SI team then participated in a seminar in Johannesburg where they presented the findings.

Focus area: Sustainable food systems  
Spatial scope: National  
SI team: Candice Kelly and Luke Metelerkamp

SOUTHERN AFRICA FOOD LAB  
*Smallholder farmer market segmentation  
toolkit*

The SI was asked to compile a comprehensive overview of the 'Smallholder Market Segmentation' project undertaken by the Southern Africa Food Lab and the National Agricultural Marketing Council. The main focus was a guide on how to use the questionnaires, how to collect data and how to produce a 'Farmer Profile' - a qualitative picture of the 'average' smallholder farmer in a particular area. The overall aim of segmenting smallholders in this way is to be able to provide the most appropriate support, advice and services to smallholders.

Focus area: Sustainable food systems  
Spatial scope: National  
SI team: Candice Kelly



ACCAI

### *The Food (R)evolutions exhibition*

This exhibition was curated to raise interest in food system issues in Africa and to showcase the transdisciplinary research methodologies used by the ACCAI partner universities. By blending photography and videos, narrative theory and contemporary perspectives on African food systems we hoped to legitimise the use of alternative forms of 'texts' as important research vehicles, well suited to the co-generation of knowledge with non-academic communities. The exhibition has travelled to Mekelle, Stockholm, Johannesburg, Spier Wine Farm, Stellenbosch University and Cape Town. It is now permanently installed at the Sustainability Institute.

Focus area: Sustainable food systems

Spatial scope: National

SI team: Luke Metelerkamp and Gwen Meyer



An African university network developing collaborative problem solving capacity for climate change adaptation

OXFAM

### *The impact of German discount retailers on farmworker conditions on South African grape farms*

*This project investigated the wine and grape value chain between South Africa and Germany. In particular, it sought to discover the influence that the practices of German discount retailers might have on the working conditions experienced by South African farmworkers. Germany is one of the most significant purchasers of South African wine exports, with the bulk thereof sold through discount retailers.*

Focus area: Sustainable food systems

Spatial scope: Regional

SI team: Scott Drimie, Stefanie Swanepoel, Blake Robinson



**OXFAM**

UN-HABITAT

### *The state of African cities 2014: Re-imagining sustainable urban transitions*

This report evaluated the key pressures facing cities in all the sub-regions in Africa, and emphasised the need to make development decisions that respond to both formal and informal systems. A green urbanism development trajectory that responds to the high levels of poverty and inequality in African cities and low levels of basic service delivery and infrastructure provisions should be adopted. It dealt with liveability concerns in African cities and emphasised the role of the youth as a key resource for transitioning to more sustainable urban living standards, productivity, employment, ecosystems management and governance regimes.

Focus area: Sustainability in African context

Spatial scope: Regional

FOOD FOR US

### *Mobile phone application to reduce food losses and waste*

The Sustainability Institute contributed specialist food systems research expertise to this consortium, funded through the 10YFP Trust Fund established by UNEP. The aim of the project was to develop and trial a mobile phone application in South Africa that contributes towards the alleviation of food insecurity and aids access to nutritious food in a country where significant food loss occurs on-farm. The research will add to the limited but growing body of knowledge on social learning, sustainable food systems and food loss and waste in South Africa.

Focus area: Food waste and food systems

Spatial scope: National

SI team: Candice Kelly, Stefanie Swanepoel, Blake Robinson



**Sustainable  
Food Systems  
PROGRAMME**

UN@HABITAT

## V&A WATERFRONT

### *Research study to eliminate plastic shopping bags*

The SI conducted a series of investigations to inform a strategy for eliminating plastic shopping bags from the retail precinct. The V&A Waterfront has become known for its pioneering efforts in sustainability, and given its coastal location and relationship with the Two Oceans Aquarium, the issue of plastic shopping bags represents an opportunity to lead the way in more responsible retail behaviour. This project resonated with the SI's desire to facilitate a transition toward a more sustainable society through practical steps informed by rigorous research.

Focus area: Plastic waste

Spatial scope: Regional

SI team: Blake Robinson



## BLOEM WATER

### *Sustainability strategy*

The SI facilitated a one-day workshop to introduce the board and executives to sustainability and its implications for 21st Century businesses, and to identify potential next steps for Bloem Water. The workshop included examples of leading practices in South Africa and group exercises to explore the imperative and way forward for Bloem Water. A report was prepared for Bloem Water that served as a primer for the development of an organizational strategy and provided a broad framework to consider in pursuit of a more sustainable business transition.

Focus area: Business sustainability

Spatial scope: Regional

SI team: Thomas van Viegen



## CENTRE OF EXCELLENCE FOR FOOD SECURITY

### *Research study on developing a Food Charter for the Western Cape*

The SI performed a scoping and feasibility study under the aegis of the Policy Programme. The study explored how a food charter process might be initiated but also established a precedent for such an undertaking and evaluated whether there is demand for this, and by whom it might be driven. The outcome of the study was a report compiled by the lead researcher. The task of the report was to explore key assumptions about what the notion of a food charter means, why it might be deserving of attention, what different ideas are out there, and how these ideas affect how they should be approached.

Focus area: Sustainable food systems

Spatial scope: Regional

SI team: Etai Even-Zahav



## WOOLWORTHS HOLDINGS LIMITED

### *Responsible sourcing review*

The SI did an investigation for Woolworths on the costs associated with private certification and/or ecolabels, and the relevance this has for their customers compared to in-house programmes that endorse and verify responsible and sustainable commodity sourcing. Woolworths is challenging the costs associated with private certification and/or ecolabels, and the relevance this has for customers compared to in-house programmes for endorsing and verifying responsible, sustainable commodity sourcing. The SI developed an assessment framework to complete a detailed assessment of all specified eco labels and in-house programmes.

Focus area: Ecolabelling

Spatial scope: National

SI team: Angela Coetzee



GIZ

*Entrepreneurship training and curricula development*

The SI assisted the Pan African University Institute of Water and Energy Sciences (PAUWES) to establish an Entrepreneurship Hub, and develop and launch an entrepreneurship curriculum. The project was commissioned by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and entailed securing strategic partnerships, delivering training for PAUWES management and student entrepreneurship workshops, and contributing to curricula development.

Focus area: Entrepreneurship  
Spatial scope: National  
SI team: Phumlani Nkontwana

DETAILS & CONTACT

To find out more about our research and consulting offering and whether we'll be a good fit for your project, please contact Angela Coetzee [angela@sustainabilityinstitute.net](mailto:angela@sustainabilityinstitute.net)

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