One Planet Living® for local governments and stakeholders

Guidance on outcomes and indicators

September 2019

UNIVERSITY OF WESTMINSTER#

Produced by Jan Gerhards over the course of a doctoral research project funded by the University of Westminster and carried out in collaboration with Bioregional.

The Director of Studies: Dr Dan Greenwood (University of Westminster). Supervisors: Professor Simon Joss (University of Glasgow), Dr Tony Manzi (University of Sheffield), and Dr Matt Wood (Bioregional).

For more information view Jan's ResearchGate profile.

© Jan Gerhards 2019.

Contents

| Introduction | 2 |
|---|----|
| Terminology and suggestions for use | 3 |
| Basic terminology | 3 |
| Indicators and targets: suggestions for use | 4 |
| References and further information | |
| Outcomes and indicators | 7 |
| Health and happiness | 7 |
| Equity and local economy | |
| Culture and community | 11 |
| Land and nature | |
| Sustainable water | |
| Local and sustainable food | 16 |
| Travel and transport | 18 |
| Materials and products | |
| Zero waste | 20 |
| Zero carbon energy | 21 |

Introduction

Bioregional has written a set of <u>Goals and Guidance</u> documents for all projects wishing to use the One Planet Living® framework, including one for cities and regions. Those documents form the basis of One Planet Living, laying out what a city should aim for to be truly sustainable, and the high-level actions and strategies that can be used to achieve this vision.

There are two further documents available for local governments and city stakeholders, which can be used to support the high-level Goals and Guidance: (1) Guidance on outcomes and indicators; and (2) Guidance on best practice actions. This document draws on the existing literature to propose specific outcomes and indicators for each One Planet Living Principle, to act as a reference for municipal officers or members of the community who are developing a One Planet Living vision or action plan for their city of region. This is not meant to be a definitive list but aims to provide inspiration and guidance – what are the types of outcomes a project should aim for and what are the indicators that can be used to track progress and monitor performance?

Terminology and suggestions for use

Basic terminology

This document is structured around the ten Principles of the One Planet Living Framework. It has been written to be compatible with the online platform: oneplanet.com. This section introduces some of the terminology used on the platform.

'Outcomes', 'actions' and 'indicators'

Plans in the digital platform are composed of 'outcomes' and 'actions', together with ways of monitoring these – indicators, images or stories. The 'graph view' is one online tool to help you create your action plan and it displays outcomes, actions and indicators. Examples of these are provided below. The digital platform is innovative in allowing the user to draw links across outcomes, actions and indicators, helping them to appreciate the relationships between these. For example, the 'action' of creating green space may impact positively on a range of outcomes across health, community, biodiversity, climate regulation and flood risk management, and it may also have some drawbacks. Indicators may attempt to track these outcomes and actions, such as the proportion of green space per resident or the improvements in biodiversity. Examples of outcomes, actions and indicators are provided below.

Outcome:

Improved biodiversity

Action:

 Incorporate biodiversity and conservation principles into all relevant local plans, including the local planning policy, economic plan, transport policy and water management plans

Indicators:

- Change in species of plants / birds / butterflies
- Number of teams and departments cooperating on biodiversity

'Organisation' and 'area-wide' plans

For cities and local governments, there are two plans types that are especially relevant:

1. Organisation plans: applicable to the local government itself, as well as any other local organisations which are developing their own action

plans. These contain outcomes, actions and indicators. The guidance in this document is particularly directed at local government organisations, but many actions are also relevant to other organisations in the local area.

2. The area-wide plan: applicable to the whole area. Organisation plans can link up to this plan, and can adopt the collective, area-wide outcomes. The area-wide plan only contains outcomes and indicators, not actions (actions are 'owned' by specific organisations and therefore only included in organisation plans). This plan specifies possible outcomes and indicators which may be included in area-wide plans.

Indicators and targets: suggestions for use

Indicators and targets should not be confused with outcomes

Avoid relying on indicators and targets as the sole source of desirable outcomes for a plan. An indicator may miss out important information – just because something can be measured, does not mean it should necessarily be prioritised. There may be multiple outcomes to consider, or something that is not measured by a particular indicator.

Indicators and targets are not the only measures of success

As indicators are not the sole basis of desirable outcomes of a plan, they should not be the only measures of success or failure. Indicators can provide useful feedback, but so can other more qualitative forms of information, such as surveys, conversations, or images.

Indicators should be appropriate to local contexts

There may be a whole range of reasons to select indicators specific to a particular local context. They may be more relevant to local plans and policies; based on locally available data; chosen with the input of local stakeholders; or have a special symbolic value to a local community. The indicators provided here should not be thought of as necessarily being the correct option. However, many of them are based on established indicator sets and methods of monitoring, and so can help provide additional comparability and link to accepted ways of doing things.

It may be better to think of targets as aspirations rather than fixed commitments

Sometimes targets are thought of as fixed commitments, against which organisations can be held accountable. Targets often attempt to balance what is necessary, i.e. what is 'sustainable', 'healthy', etc. – with what is achievable.

This can be a difficult compromise to strike, either resulting in targets which downplay what is necessary or truly sustainable, or in targets which are unlikely to be achieved. Fixed commitments must also be based on predictions of likely achievements, which can be difficult to make accurately. Over-focusing on particular numerical targets can also detract from a more holistic approach to decision-making based on information about broader outcomes. It may be more helpful to think about and communicate targets as flexible aspirations. This way they can be ambitious and drive change without limiting future decision-making or becoming a source of criticism at a later stage. If circumstances are very challenging, organisations may wish to distinguish between what is desirable, or necessary, and what they are likely to achieve – for example a local authority may acknowledge the necessity of decarbonising within the next decade, but communicate the fact that this will be difficult to achieve changes in national policy.

Some indicators may link more strongly to organisation-level actions and outcomes

Some indicators are more within the control or influence of a single organisation than others. For example, indicators relating to an organisation's land and buildings, employees, procurement; or a those relating to a local government's spatial planning policies. It may be helpful to consider the extent of this control and influence, if indicators are being used to provide feedback on actions, and are being used together with targets. Nevertheless, an organisation may also wish to include other indicators to provide more 'contextual' information, giving a better overall picture of sustainability, even if indicators are not directly within its control or influence. It may be better to put these in an 'area-wide' plan, however (see above).

Some indicators may be more suitable for an area-wide plan

Some indicators may not be within the control or influence of a local government, or a single organisation, but they may still be important for providing a better overall picture of sustainability. These may be more relevant at the area-wide or collective level, such as those relating to citizen behaviours or citizen health outcomes.

Consider what data is available

When selecting an indicator it is important to ensure that data is easy enough to obtain. Easier data sources may include existing public data, information from local plans, or information from staff within an organisation. It may, for example, be more difficult to obtain data that requires additional surveys of the community. However, when selecting indicators based on existing data availability it is important to consider other factors such as how well they are

linked to outcomes and actions, how relevant they are, and whether they help to provide a good overall sense of sustainability.

Do not use too many indicators

From previous experience, it seems that a medium-sized local government team may wish to avoid using more than approximately 30 or 40 indicators. Too much time spent collecting information may detract from the time spent actually implementing the action plan.

References and further information

Indicator sets which are referenced in brackets are mainly based on the sources below. Many of these sources come with more detailed definitions and guidance on monitoring.

- Singapore City Biodiversity Index ('Singapore) see definitions
- Data for Cities World Council for City Data ('WCCD') see <u>interactive</u> site and <u>ISO 37120 definitions (paywall)</u>
- SDG indicators ('SDGs') see <u>definitions</u>
- Global Reporting Initiative ('GRI') see <u>definitions</u>
- OECD Better Life Index ('OECD') see interactive site and data
- Sustain's Good Food for London ('Sustain') see <u>definitions</u>
- PAS 2070 see definitions and case study

Outcomes and indicators¹

Health and happiness

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|--|-----------------------------------|--|
| High satisfaction with workBetter health and safetyMore flexible working | Staff, operations and fleet | Employee turnover (GRI)Employee satisfaction (1 - 10) |

Suggested plan type: organisation (local government) or area-wide

| Outcomes to consider | Who / what? | Suggested indicators |
|--|---|---|
| Reduced air pollution Climate change adaptation Buildings are comfortable | Planning and housing | Air pollution (WCCD / SDGs) % dwellings within (a) 400m and (b) 1km of a shop selling fresh ingredients |
| Access to healthy food More opportunities for recreation Healthier lifestyles Bullying is prevented Better abuse prevention and support Better mental health and addiction support Heat islands are avoided Natural hazards are managed effectively | Initiatives (e.g. sports, fitness and leisure / schools / retail) | Uptake of health classes or gym memberships Number and % of schools participating in initiative, e.g. health / sports / anti-bullying % and number of shops participating, e.g. reducing alcohol strength |

¹ Indicator sources (e.g. GRI or WCCD) are given in brackets. For definitions and benchmarking data see 'references and further information', above.

info@bioregional.com | bioregional.com | @Bioregional | @OnePlanetLiving | +44 (0)20 8404 4880

| Outcomes to consider | Who / what? | Suggested indicators |
|---|--|---|
| Healthier lifestyles Access to healthcare and care Better healthcare services Better social care Better mental health and addiction support Better domestic abuse prevention and support Better emergency care Better coordination and partnership working | Health and social care ervices an and use cort are and | Coverage of essential health services (SDGs) Number of physicians / nurses / mental health practitioners per 100,000 (WCCD) Emergency response time (WCCD) Child mortality under five per 1,000 births (WCCD / SDGs / OECD) Life expectancy at birth (WCCD / SDGs / OECD) |
| Bullying is prevented | Fire services | Fire emergency response time (WCCD) Deaths due to fire per 100,000 (WCCD) |
| | Citizens and community | % of population which is physically active (75 mins intensive / 150 mins moderate activity per week) % of population which is obese |

Equity and local economy

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|---|-----------------------------------|---|
| People receive a living wage Better training and development More support for local businesses Ethical supply chains Accessible buildings | Staff, operations and fleet | Number of apprenticeships created Hours of training per employee (GRI) % employees receiving living wage % of managers who are women (GRI) |
| Gender equalityNo discrimination | Catering and procurement | % of purchases from SMEs % of purchases from within 100km % of suppliers undergoing human rights screening (GRI) |

| | | • |
|--|---|---|
| Outcomes to consider | Who / what? | Suggested indicators |
| More affordable housingLand rights are secureSlums are upgraded | Planning and housing | % living in slums (WCCD)Affordable housing waiting lists |
| More training and good jobs More support for local businesses More people receiving a living wage Accessible buildings and spaces Gender equality No discrimination Better access to finance | Initiatives (e.g. training / apprenticeships / incubators / loan schemes / smart city / living wage / university collaborations / homelessness) | Business growth in target industries The number of incubators, coworking spaces or maker spaces in the locality Enrolment in innovation or business support programmes Homeless per 100,000 (WCCD) |
| Better digital connectivity More innovation A resilient economy Sound public finances Reduced poverty A robust safety net | Politics and governance | Tax collected as a % of tax billed (WCCD) Debt service as a % of government revenue (WCCD) % covered by safety net (SDGs) |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|----------------------------|---|
| Better business support More people receiving a living wage More training and jobs | Communications | •Cell phone connections per 100,000 (WCCD) •Internet connections per 100,000 (WCCD) |
| Better access to financeDigital connectivityMore innovationA resilient economy | Other area-wide indicators | % living in poverty (WCCD / SDGs) Number of businesses per 100,000 (WCCD) Median house price to income ratio (UN Habitat) |

Culture and community

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|---|-----------------------------------|--------------------------------|
| More social activitiesMore knowledge sharingBetter dispute resolution | Staff, operations and fleet | • Number of social events held |

Suggested plan type: organisation (local government) or area-wide

| Outcomes to consider | Who / what? | Suggested indicators |
|--|---|--|
| Good public spaceMore public artBetter arts and cultureBetter community and | Planning and housing | Outdoor recreation space per capita (WCCD)Indoor recreation space per capita (WCCD) |
| youth services Heritage is conserved Planning is participatory Safer communities More volunteering Better educational access Better educational outcomes Increased political engagement and freedom Low corruption Good management of migration | Initiatives (e.g. arts, culture, heritage, festivals / schools / universities / libraries, community and youth services / volunteering) | Volunteer hours committed Number of events held and people attending Number of visits per pupil per year |
| | Politics and governance | Convictions for corruption per 100,000 (WCCD) % local government seats held by women (WCCD) |

| Outcomes to consider | Who / what? | Suggested indicators |
|--|------------------|---|
| Better arts and culture Better community and youth services Better crime prevention Safer communities | Crime and police | Police per 100,000 (WCCD) Violent crime per 100,000 (WCCD) Homicides per 100,000 (WCCD) |

| Increased volunteering Better educational access | | Police emergency response time (WCCD) |
|--|------------------------|--|
| Better educational outcomes | Citizens and community | Voter turnout for local elections (WCCD) Primary and secondary education participation and completion rates (WCCD) Higher education degrees per 100,000 (WCCD) |

Land and nature

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|------------------------|--------------------|-------------------------------------|
| •Improved biodiversity | Land and buildings | • See biodiversity management below |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|--|---|
| More public green space Improved biodiversity Enhanced climate regulation (cooling, sequestration, purification) Better connectivity Drought resilient plants More nature activities and education Good biodiversity management and partnership working Lower flood risk | Planning and housing | Green space, hectares per 100,000 (WCCD / Singapore) % of development on greenfield sites |
| | Biodiversity governance | Number of teams and departments cooperating on biodiversity (Singapore) |
| | Biodiversity management | Change in species of plant / birds / butterflies / other groups (Singapore) Connectivity mesh size (see Singapore indicators for a definition) Trees planted per annum (WCCD) Condition of specified habitat, e.g. poor / average / good |
| | Initiatives (e.g. public engagement / schools) | Number of events per year (Singapore) % of schools participating in biodiversity programme Biodiversity visits per child per year (Singapore) |

Sustainable water

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|--|--------------------|--|
| Water is conservedFlood resilient buildings | Land and buildings | Water consumption per employee, I/day |

Suggested plan type: organisation (local government) or area-wide

| Outcomes to consider | Who / what? | Suggested indicators |
|---|-----------------------------|---|
| Access to clean water and sanitation Water is conserved Sustainable fresh water supplies Healthy water habitats Robust flood risk management Climate change adaptation Less water pollution | Planning and housing | % permeable surface area (Singapore) % homes built on land at risk of a 1-in-100-year flood |
| | Flood risk management | Number of teams and departments cooperating on flood risk |
| | Initiatives (e.g. retrofit) | Number and % of homes retrofitted as part of water saving initiative Number of water saving measures installed as part of initiative |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|------------------------------------|--|
| Access to clean water and sanitation Water is conserved Sustainable fresh water supplies Healthy water habitats Adaptation to climate change Drought resilient agriculture Sustainable fishing Better coordination and partnership working on water issues | Freshwater resources and utilities | Access to sanitation (WCCD) Access to drinking water (WCCD) % wastewater receiving primary / secondary / tertiary treatment (WCCD) % metered homes Domestic and total water consumption per capita, I/day (WCCD) Water withdrawal as a % of available resource (SDGs) % of bodies with good ambient water quality (SDGs) |

| | Number of days specified body of water runs dry |
|------------|---|
| Coastlines | Average marine acidity (SDGs)% fish caught sustainably |

Local and sustainable food

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|--|--------------------------|---|
| Lower impact food More humane and plant-based foods in catering More products purchased are Fairtrade Healthy and safe catering | Catering and procurement | % fruit and veg (by value) which is seasonal, local or organic % of food purchased (by value) which is plant-based % of eggs (by value) which are free-range % of meat and dairy (by value) which is outdoor-reared or organic Whether buying Fairtrade products of two or more significant types, e.g. tea, coffee, fruit juice (Sustain) % of fish (by value) which is sustainably sourced |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|---|---|
| More community food growing Improved access to healthy food Lower impact food More humane and plantbased foods in catering | Planning and housing | % residents 400m from a healthy food outlet (STAR) Support for food growing in planning policy (Sustain) Number of community gardens, city farms or allotment sites |
| More products purchased or sold are Fairtrade Healthy and safe catering Fish purchased or sold is sustainable Adequate nutrition Food security and resilience | Initiatives (e.g. public sector and schools catering / local food partnerships / retail and catering) | % of schools / care homes / public organisations always offering plant-based options % of schools / care homes / public organisations buying free-range eggs (Sustain) % of schools / care homes / public organisations buying outdoor-reared or organic meat or dairy (Sustain) % of schools / care homes / public organisations buying |

- seasonal, local or organic fruit and vegetables (Sustain)
- % of schools / care homes / public organisations buying sustainable fish (Sustain)
- % of schools / care homes / public organisations buying Fairtrade products of two or more significant types, e.g. tea, coffee, fruit juice (Sustain)
- Existence of local food partnership (Sustain)
- Number and percentage of relevant food businesses engaged in a healthy catering initiative
- % malnutrition among under-5-year-olds – either wasting or overweight (SDGs)

Travel and transport

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|---|-----------------------------------|---|
| More walking and cycling More sustainable transport Low-emission vehicles More car sharing | Staff, operations and fleet | % staff travelling by sustainable transport % of fleet which are low- emission Organisation's transport emissions |

Suggested plan type: organisation (local government) or area-wide

| Outcomes to consider | Who / what? | Suggested indicators |
|--|--|---|
| Better air qualitySafer roadsMore walking, cycling and | Planning and housing | •Km bike paths per 100,000 (WCCD) |
| active transport Compact, walkable communities More car sharing Low-emission vehicles More freight consolidation | Initiatives (e.g. EVs / car clubs / fleets and deliveries / schools / freight consolidation) | Electric car charging points per 100,000 people % schools participating in sustainable transport initiative % students travelling via active transport Number of freight consolidation centres |

| Outcomes to consider | Who / what? | Suggested indicators |
|--|------------------------|--|
| Better air qualityReduced emissionsImproved public transport access, use and quality | Public transport | Public transport trips per capita (WCCD) % of people within 0.5 km of public transport which runs at least every 20 mins (SDGs) |
| | Citizens and community | •Road deaths per 100,000 (WCCD) |

Materials and products

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|---|--------------------------|---|
| Low impact productsGoods are stored and reused | Catering and procurement | % of purchases meeting published sustainability policy % of suppliers with sustainability polices % of suppliers without sustainability policies engaged in developing them |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|--|--|
| Low impact construction materials Low impact products More reuse and sharing A more circular economy | Planning and housing | Existence of local materials and building guidelines for developers % of developers adopting guidelines |
| | Initiatives (e.g. public sector procurement) | • % of specified public institutions, such as schools or care homes, adopting published policy |

Zero waste

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|--|--------------------------|---|
| Increased recycling and compostingLess waste produced | Staff and operations | • % waste recycled or composted |
| | Procurement and catering | Waste produced per employee, kg/year |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|---|--|
| Less wasted produced Increased recycling and composting Safe disposal of waste More reuse of products and waste materials A more circular economy | Planning and housing | • % of developments using guidelines |
| | Waste collection and disposal | Tonnes of waste produced per capita % waste disposed of via recycling / incinerator / open dump / sanitary landfill / other means / (both WCCD) |
| | Initiatives (e.g. circular economy) | Number of organisations participating |

Zero carbon energy

Suggested plan type: organisation

| Outcomes to consider | Who / what? | Suggested indicators |
|--|----------------------------------|--|
| Efficient buildings and appliances More energy from renewables Low GHG emissions | Land and buildings | Energy consumption due to buildings, total and per employee, kWh/year % renewable energy |
| | General emissions (organisation) | Scope 1 and 2 emissions, total and per employee / year (GRI) Scope 3 emissions, total and per employee / year (GRI) |

Suggested plan type: organisation (local government) or area-wide

| Outcomes to consider | Who / what? | Suggested indicators |
|--|-------------------------------|---|
| Efficient buildings and appliances More energy from renewables Reduced fuel poverty Low GHG emissions Clean fuels in homes Access to energy | Planning and housing | • % of buildings meeting benchmark |
| | Initiatives (e.g. retrofit) | Percentage of suitable roof space with solar photovoltaic panels installed % of homes surveyed as part of initiatives % of homes with retrofit measures as part of initiative |
| | General emissions (city-wide) | Direct plus supply chain and consumption-based emissions (PAS 2070) |

| Outcomes to consider | Who / what? | Suggested indicators |
|---|---------------------|---|
| Access to energyMore energy from renewablesReduced fuel poverty | Energy utilities | % population with access to electricity (WCCD) Total and domestic electricity consumption per capita, kWh/year (WCCD) % of electricity from renewables (WCCD) |