USING INDICATORS TO EFFICIENTLY AND EFFECTIVELY TRACK SOUTH AFRICA'S TRANSITION TO A LOW-CARBON ECONOMY AND SOCIETY

Presentation to the National Climate Change Response Dialogue (NCCRD) 2014 conference,

Session 21: "Using data to effectively track the transition to a low carbon South Africa", 09h00 – 10h30, Thursday 13 November, Gallagher Grill, Gallagher Convention Centre, Midrand

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Compiled and presented by Peter Lukey, Chief Policy Advisor: Strategic Environmental Intelligence
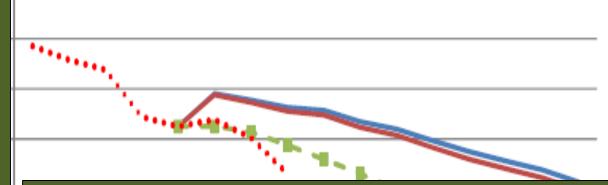
20 YEARS OF FREEDOM

What is the IRP Update saying?

Figure 9 – Actual electricity intensity relative to IRP2010 expectations

The IRP updates suggests that our reduced electricity demand is due to –

- Eskom's buyback programme.
- Suppressed demand.
- Electricity price increases
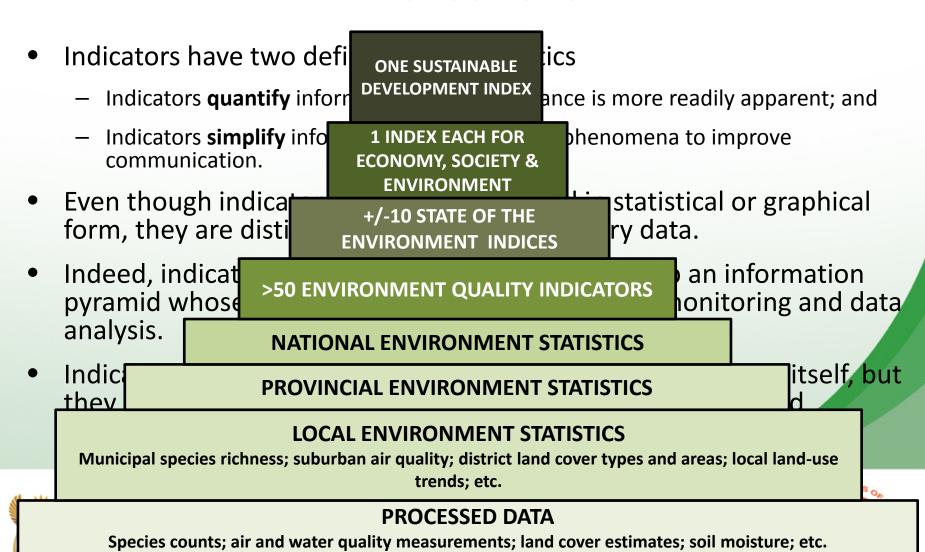- Price motivated energy efficiency improvements

But how would we know if reduced electricity demand is not actually due to –

- Concerns around carbon footprint?
- Concerns around impact of carbon tax?
- Delinking energy from economic growth?
- Genuine attempts to mitigate climate change?

Source: Own calculat

Indicators

- Indicators have two defi____ ____tics
  - Indicators **quantify** inform____ ____ance is more readily apparent; and
  - Indicators **simplify** info____ ____henomena to improve communication.

- Even though indica____ ____statistical or graphical form, they are disti____ ____ry data.

- Indeed, indicat____ ____an information pyramid whose____ ____onitoring and data analysis.

- Indic____ ____itself, but they ____

ONE SUSTAINABLE DEVELOPMENT INDEX

1 INDEX EACH FOR ECONOMY, SOCIETY & ENVIRONMENT

+/-10 STATE OF THE ENVIRONMENT INDICES

>50 ENVIRONMENT QUALITY INDICATORS

NATIONAL ENVIRONMENT STATISTICS

PROVINCIAL ENVIRONMENT STATISTICS

LOCAL ENVIRONMENT STATISTICS
Municipal species richness; suburban air quality; district land cover types and areas; local land-use trends; etc.

PROCESSED DATA
Species counts; air and water quality measurements; land cover estimates; soil moisture; etc.

RAW DATA
Field measurements, instrument readings, satellite images, etc.

Its all about the desired outcome

How do you measure and report progress against the following desired outcome? –

By 2030, South Africa has a national safe, convenient, reliable, affordable and low-carbon public transport network that makes everyday use of private vehicles an unnecessary and frowned-upon extravagance.

An indicator based on statistics –

- Crime stats
- Passengers numbers
- Vehicle ownership stats
- Fuel usage stats
- Road traffic accident stats
- Vehicle counts
- Survey results
- Passenger profile stats
- Income tax transport deduction claim stats
- Public transport fleet stats
- Transport-related carbon emissions

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

20 YEARS OF FREEDOM

Its not about the science

- Even though indicators are often presented in statistical or graphical form, they are distinct from statistics or primary data

- Despite scientists' vocal calls for an "improved science-policy dialogue" and "evidence-based policy", scientists may, through their suspicion around "non-scientific" indicators, be one of the principle barriers to these ends

- For "improved science-policy dialogue" and "evidence-based policy" we must move from communication using complex and intimidating statistics to easily understood and illustrated indicators that are underpinned by good science.

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

20 YEARS OF FREEDOM
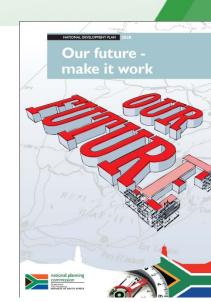
It all about the audience

- Indicators must be tailored to meet the needs of the policy-makers and policy-shapers

- Indicators must provide a simple measure of often complex objectives

- There must be audience buy-in – an acceptance that this is how we measure our desired outcomes

I have a space that I can call my own.

This space I share.

This space I cherish with others.

I maintain it with others.

Its all about aggregation

- Aggregation provides a level of anonymity that fosters up-front acceptance of indicators and reduced down-stream push-back of embarrassing results, but

- Allows for the drilling-down to areas of success or failure

- Aggregation allows for almost real time updates – someone is always counting something somewhere

- Aggregation allows us to start reaping the potential benefits of "big data" and our rapidly evolving ICT technologies

- Aggregation promotes joined-up-government – cooperation, coordination, alignment and integration

Time to innovate

- Its all about creativity

- Its all about communicating science

- Its all about promoting the management of what we are measuring

- Its all about co-creation and co-ownership

- Its all about adoption or adaptation where there is no need for re-invention

- Its all about measuring outcomes, not activities

- Its all about efficiently and effectively tracking South Africa's transition to a low-carbon economy and society

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

The department will soon be embarking on a participatory process of sustainable development indicator co-creation including continued work on indicators that efficiently and effectively track South Africa's transition to a low-carbon economy and society

Drop us a line if you want to be involved