State of the Environment Reporting in the London Borough of Croydon

CROYDON
www.croydon.gov.uk

Emily Hartzell
Aren Johansen
Thomas Liguori
Jennifer Ober

http://cache.virtualtourist.com/2116998-Things_To_Do-Croydon.jpg

Background

Sustainable Development:
"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"

(WCED, 1987)

2007 Labour Party Instated National Indicator Framework
- 198 Indicators
- 10 Environmental Indicators

2010 Conservative Party Removed National Indicator Framework
- CRC only environmental indicator
- Budget Cuts

Croydon and the State of the Environment Report

Prior to Political Changes
- First State of the Environment Report in 2010
- Constructed by one person
- Time: Six months to complete
- Cost: 10,000-20,000 pounds

After Political Changes
- Loss of National Indicator Set
- Budget Reduced by Half

(Croydon Environment and
Climate Change Partnership, 2010)

Overall Goal:

Propose an efficient, inexpensive process for identifying, compiling, analyzing, and reporting relevant data to produce the State of the Environment Report .

Outline

Slides before 1st Section Divider

Workbook

Templates

Recommendations

Indicator Framework

Report and Pamphlet

Data Storage

Microsoft Access
- Data management system
- Generates graphs that automatically update
- Graphs cannot easily be exported
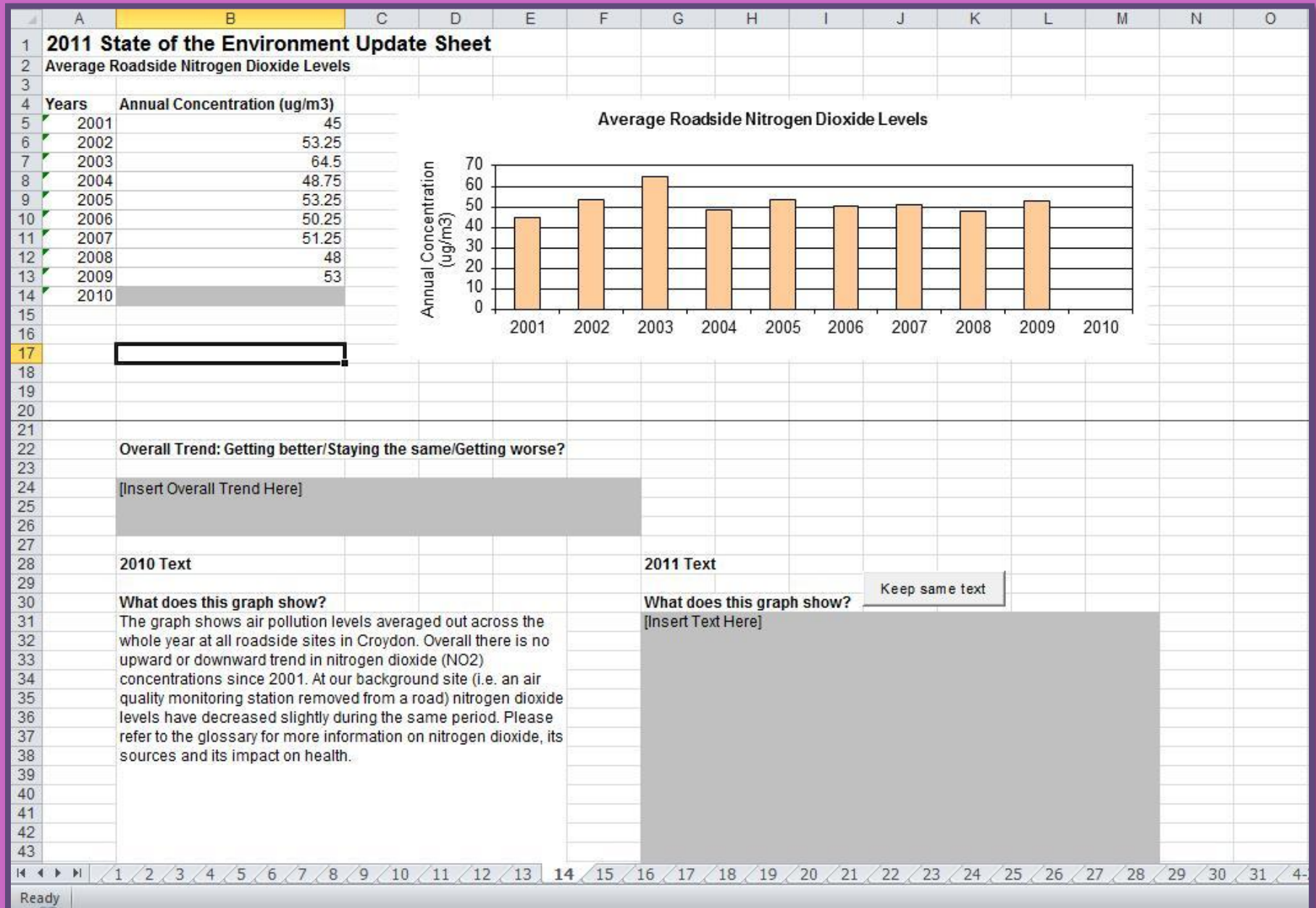- Difficult to learn

Google Docs
- Online
- Similar feature to Excel
- Required a Google account
- Slow with large file and Windows XP

Microsoft Excel
- Data, text, and graphs in one file
- Graphs easy to alter and export
- User-friendly
- Did have SharePoint feature but unavailable on Council computers

Excel Workbook

2011 State of the Environment Update Sheet

Average Roadside Nitrogen Dioxide Levels

Years	Annual Concentration (ug/m3)
2001	45
2002	53.25
2003	64.5
2004	48.75
2005	53.25
2006	50.25
2007	51.25
2008	48
2009	53
2010	

Average Roadside Nitrogen Dioxide Levels

Overall Trend: Getting better/Staying the same/Getting worse?

[Insert Overall Trend Here]

2010 Text

2011 Text

Keep same text

What does this graph show?

The graph shows air pollution levels averaged out across the whole year at all roadside sites in Croydon. Overall there is no upward or downward trend in nitrogen dioxide (NO2) concentrations since 2001. At our background site (i.e. an air quality monitoring station removed from a road) nitrogen dioxide levels have decreased slightly during the same period. Please refer to the glossary for more information on nitrogen dioxide, its sources and its impact on health.

What does this graph show?

[Insert Text Here]

Data Collection

2011 State of the Environment Update Sheet

Canopy Cover: Street Trees and Woodland

Year	Yr 2004	Yr 2005	Yr 2006	Yr 2007	Yr 2008	Yr 2009	Yr 2010	Yr 2011
Number o	33000	32000	32250	32500	32750	33000		

Insert Data

E-mails instead of online surveys or collection

- Contact list
- Individual sheets from workbook
- E-mail templates
- Telephone calls
- Inputting data into workbook

Overall Trend: Getting better/Staying the same/Getting worse?

[Insert Text Here]

Insert Trend

2011 Text

What does this graph show?

[Insert text here]

Keep same text

Insert Text   Or Press Button

85% data collected for 2011
- Some data will not be available until a later date

58% used spreadsheet

2-3 week return

Template Program

Microsoft Word
- Template Feature
- Brochure Feature
- The above are not available features on Word 2003

Microsoft Power Point
- Was used in past report
- no organization
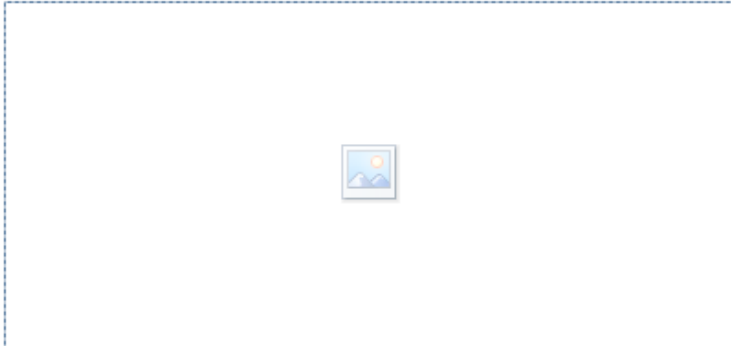- generating a repeatable template is infeasible

Microsoft Publisher
- User-friendly
- Easily manipulated
- Template Feature

http://thecorner.org/default_prog/postcard/images/waddonpark.jpg

Report Template

[Insert Title Here]

[Insert Text Here]

[Insert Title Here]

[Insert Text Here]

[Insert Title Here]

[Insert Text Here]

Pamphlet Template

Our Homes

[Insert "Reducing CO$_2$ Emissions from our Homes" Summary Here]

Our Air

[Insert "Transport and Air Quality" Summary Here]

Our Infrastructure

[Insert "Green Infrastructure and Climate Change" Summary Here]

Our Businesses

[Insert "Low Carbon Economy" Summary Here]

Our Streets

[Insert "Waste, Recycling and Street Cleanliness" Summary Here]

Our Climate

[Insert "Climate Change Adaptation" Summary Here]

State of the Environment Report 2011

Completed 94% of the Report
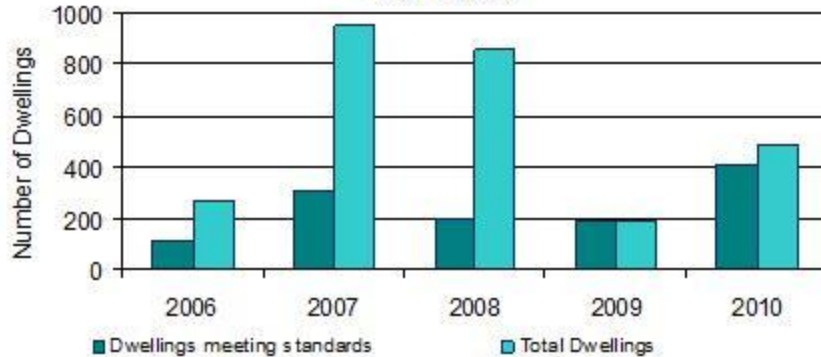**Completed 100% of the Pamphlet**

Environmental Impact of Private Housing

Improving: The percentage of developments meeting standard has improved

New Developments Achieving Ecohomes Very Good or CSH Level 3

Number of Dwellings (y-axis: 0, 200, 400, 600, 800, 1000)

Years: 2006, 2007, 2008, 2009, 2010

Legend: Dwellings meeting standards | Total Dwellings

What does this graph show?

In 2010 84% of major housing completions (10 units or more) achieved BREEAM Ecohomes Very Good or Code for Sustainable Homes (CSH) Level 3. This is slightly down on the previous year, although this can be mostly explained by the fact that a number of large developments completed during this time received planning permission before the requirements entered into force.

Croydon was one of the first local authorities to require major housing developments to incorporate renewable energy technologies to reduce site CO_2 emissions by 10% and the first to implement this policy for major non-residential developments. New housing is expected to meet high environmental standards in advance of the national requirement for zero carbon homes from 2016.

Flagship Private Developments

BREEAM (BRE Environmental Assessment Method) is the leading and most widely used environmental assessment method for buildings.

A development in Sanderstead Road, Croydon was given national recognition by scooping one of the top prizes at the BREEAM sustainable building awards 2010. Key environmental features that led to the award include:

- A well located development site with good access to local amenities and public transport
- Use of sustainable drainage techniques
- Energy efficient internal and external lighting
- Solar photovoltaic panels (BREEAM 2010) Homes designed to high environmental standards can become very desirable properties due to the quality of the building and financial savings from reduced utility bills. In a house designed to CSH Level 4, energy bills can be reduced by up 30% or more.

Indicator Page Analysis

Title/Caption
- unclear
- similar
- long

Indicator
- Data is/is not collected

Graph/Data
- Data does not match chart
- Incorrect use of chart
- Confusing labels

Text
- Long
- Should state what is important to the reader

Picture
- Small
- Blurry
- Irrelevant

Indicator Framework

Keep:
- CO_2 Emissions in Private Housing
- CO_2 Emissions in Council Run Social Housing
- Environmental Impact of Social Housing
- Environmental Impact of New Built Homes-Private
- Sustainable Schools
- CO_2 Emissions from Non-Residential Buildings
- Cycling
- School Travel
- Air Pollution- NO_2
- Air Pollution- PM_{10}
- Unacceptable Levels of Litter and Detritus
- Green Infrastructure in Croydon
- Street Trees and Woodland
- Access to Nature
- Urban and Semi-Urban Food Growing
- Dealing with Heat Stress
- Water Management
- Global Climate Dimension

Add:
- Croydon Council CO_2 Emissions
- Proportion of Green/Open Spaces Managed for Nature Conservation

Remove:
- Tackling Fuel Poverty
- CO_2 Emissions from Council's Operations
- Improving the Environmental Performance of Local Businesses
- Proportion of Green/Open Spaces Managed for Nature Conservation
- Green Roofs on New Developments

Partial:
- Volume of Traffic
- Amount of Household Waste Per Head
- Proportion of Household Waste Sent to Landfill
- Recycling and Composting Levels
- Flood Risk

Trends in Other Boroughs

- Focus is on CRC
- Remove indicators where data in no longer collected
- Choose indicators where data is already being collected
- Measurements made outside the council save money
- An Environmental Management System EMS would give guidelines on what to report

Borough	Report	Data Storage	Data Collection	Template	EMS
Brent	Environment Report	Email Folders	E-mail	Yes	ISO 14001
City of London	Sustainability Review	Excel	E-mail	No	No
Islington	State of the Environment	Excel	E-mail	Yes	ISO 14001
Kirklees	Environmental Statement	Excel	E-mail	No	EMAS
Merton	Annual Monitoring Report	- - - - - - - - -	E-mail	Yes	No
Sutton	Spotlight on Environment	Excel	E-mail	No	EMAS

Recommendations

Short Term

- **Divide the Work**
    - 2 people 36.5 hours
    - 3 people 24.3 hours
    - 4 people 18.25 hours

- **Add the making of the report to list of job objectives**

Long Term

- **Web Based**
    - Internet or Intranet
    - More easily accessible
- **An EMS would be beneficial in the environmental reporting process**
    - 66% boroughs interviewed had an EMS
    - Ensure that State of the Environment Report be annually published
    - Not viable at the time due to expense

http://www.disused-stations.org.uk/c/central_croydon/central_croydon2.jpg

Instruction Manual

1. • Using and Preparing Workbook

2. • Data Collection

3. • Using Templates