



**environment  
& tourism**

Department:  
Environment Affairs and Tourism  
REPUBLIC OF SOUTH AFRICA

National Climate Change Response Database



# **NATIONAL CLIMATE CHANGE RESPONSE DATABASE**

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- why have a database?
- the database
- current statistics



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why have a database?



# background

- South Africa, as a nation, has, is and will implement numerous climate change response interventions ranging from research, policies, strategies, action plans, legislation and regulation to practical mitigation and response projects.
- However, these interventions are carried out by all spheres of government, research institutions, business and industry and NGOs.
- Hence, information on South Africa's past, present and future interventions is scattered and, often, inaccessible.



## as a result...

- Duplication of efforts is often unavoidable with the wastage of scarce human, financial and technical resources;
- “Reinventing the wheel” is commonplace;
- The overall impact of interventions is unknown;
- Researchers, policy-shapers and policy-makers do not have the “big picture”;
- “The whole being greater than the sum of its parts” cannot be monitored;
- Scarce human, financial and technical resources are used in “tracking down” rumoured interventions;
- Skills, knowledge and technology transfer is inhibited;
- Productive partnership and/or interrelationship opportunities may be being lost;
- Best practise and replicable pilot projects remain largely unknown;



## in response...

- The department realised that this situation was not conducive to an efficient, effective, integrated and cohesive climate change response.
- **Thus, the department set about building a very simple database of interventions that were known.**



## the result...

- Information was extremely difficult to find;
- Some information holders were suspicious of the department's intentions;
- The maintenance of the database was extremely time and labour intensive;
- The database was very limited and seldom up to date; and
- The department was sometimes accused of misrepresenting projects.
- However, this early work also demonstrated the utility of such a database.



## the solution...

- In August 2008, the department secured funding from the Danish Government to fast-track the development and establishment of an electronic, web-based, information management system to be known as the “National Climate Change Response Database”
- The design called for a system that will efficiently and effectively collect, collate, store, sort, analyse and report information relating to significant South African climate change response interventions since 1 January 2000.





## the objective...

- The overall objective of the project is framed as a desired outcome as follows:

***By July 2009, there is general, easy access to all available, significant, South African climate change response information and the systems are in place to ensure that this information is kept accurate, relevant and up-to-date thereafter.***



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the database





# map view

Zoom in to see each project



High level map shows summaries by Province.

## SACC Integrated Clean Energy Project

Project Type: Mitigation  
Location:  
Newcastle  
Newcastle Local Municipality (KZ262)  
Amajuba District Municipality (DC25)  
KwaZulu Natal  
[click here for details](#)

Click on the pointer to see information about a specific project



# registration



User Name:

Password:

[Login](#) [Forgot Password](#)

Welcome  
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individ  
depart  
Use th  
informe

Registration

Register

Search Project

Google Earth

inte

User Registration - Windows Internet Explorer provided by ERM

http://ewsepps05.erm.com/deat/UserManagementLogin.aspx?id=1&outside=

File Edit View Favorites Tools Help

Register Close

**user registration**

Title\*:  First Name\*:  Surname\*:

Job Title:

Organisation\*:

Town:

Province:

Postal Code:

Country:  South Africa

Email Address\*:

Telephone\*:

Please indicate which Interest Group you are representing\*:  -Select-

Mandatory fields are highlighted with \*.

Click Register to complete a registration form and receive login information by email.

The registration details are for DEAT use only. The only contact information reported from the site is Project Contact and the associated email address.



# searching the database

the database can be search using an extensive set of filter criteria



Welcome: Lisa Constable

Search

- All Projects
- Mitigation Projects
- Adaptation Projects
- Research Projects
- View Google Earth

Reporting

- View Reports

Project

- Add Maintain Projects

Region

- View Region

Close

search – all projects

project details

Project Title:

Lead Agent:

Funding Organisation:

Host Organisation:

Host Sub Sector:

Status:

Estimated Budget Range ZAR (Lower):

Funding Status:

location

Province:

Local Municipality:

Host Partner(s):

Funding Partner(s):

Host Sector:

Host Sub Sub Sector:

Description:

Estimated Budget Range ZAR (Upper):

Metro/District Municipality:

Town:

Notes:

- All text fields will filter based on the entered text appearing anywhere in the respective fields.
- Clicking Search without entering any filters above will return a list of all projects.

Search    Reset

Complete the filters as desired in order to narrow search.

Click search to obtain a list of projects that meet the selection criteria (choosing no criteria will bring up all projects)

Additional filters available if searching mitigation, adaptation or research projects



# export to excel

Search Reset

Export to Excel

Project Number	Project Title	Project Type	Type of Intervention	Province	Metro/District Municipality	Local Municipality	Town	tCO2e	Research Type
0000000028	2T... Ho...			Gauteng	Ekurhuleni Metropolitan Municipality (Eku)				
0000000070	Ad...			Western Cape	Cape Town Metropolitan Municipality (CPT)				Social
0000000014	Ar... Change Study	Research	Mitigation	North West	Southern District Municipality (DC40)	Matlosana Local Municipality (NW403)	Klerksdorp	0	Economic and market impacts
0000000017	AngloGold Ashanti Energy Efficiency Projects	Project	Mitigation	North West	Southern District Municipality (DC40)	Matlosana Local Municipality (NW403)	Klerksdorp	865460.115936	
0000000017	AngloGold Ashanti Energy Efficiency Projects	Project	Mitigation	Gauteng	Johannesburg Metropolitan Municipality (JHB)		Johannesburg	0	
0000000018	Ankerlig Open Cycle Gas Turbine Station	Project	Mitigation	Western Cape	Cape Town Metropolitan Municipality (CPT)		Atlantis	0	
0000000046	Atlas for the Geological Storage of Carbon Dioxide in South Africa	Research	Mitigation	Gauteng	Johannesburg Metropolitan Municipality (JHB)			0	R&D
0000000060	Bethlehem Hydro	Project	Mitigation	Free State	Thabo Mofutsanyane District Municipality (DC19)	Dihlabeng Local Municipality (FS192)	Bethlehem	0	
0000000038	Cane Trash Burner	Research	Mitigation	KwaZulu Natal	eThekweni Metropolitan Municipality (ETH)			0	R&D
0000000069	Cape Town Adaptation Framework	Research	Adaptation	Western Cape	Cape Town Metropolitan Municipality (CPT)			0	Scientific

Export to excel for download of all information available on each selected project

Run search for desired projects



# add/maintain projects (1)



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## add / maintain projects

[Add new project](#)

Search

- All Projects
- Mitigation Projects
- Adaptation Projects
- Research Projects
- View Google Earth

Reporting

- View Reports

Project Manager

- Add/Maintain Projects

Registration

- Update Registration

View/Edit	Project ID	Project Title	Acceptance Status
<a href="#">View/Edit</a>	000000001	IFM In...	Accepted
<a href="#">View/Edit</a>	000000067	Working for Wetlands	Accepted
<a href="#">View/Edit</a>	000000066	Kintersun	Accepted
<a href="#">View/Edit</a>	000000068	Solar Water Heaters 500	Accepted
<a href="#">View/Edit</a>	000000070	Adaptation Plan	Accepted
<a href="#">View/Edit</a>	000000069	Cape Town Adaptation Framework	Accepted
<a href="#">View/Edit</a>	000000071	Coastal Protection Zone 1	Accepted
<a href="#">View/Edit</a>	000000072	Coastal Protection Zone 2	Accepted
<a href="#">View/Edit</a>	000000073	Energy Efficient, Solar Water Heating Council rental housing	Accepted
<a href="#">View/Edit</a>	000000074	Energy Efficient Greenfields Housing	Accepted

Change page: < 1 2 > | Displaying page 1 of 2, items 1 to 10 of 17.

Add details of a new project.

View or edit your existing projects.

New projects are reviewed by DEAT prior to being validated to appear in the reports or search results.



# add/maintain projects (2)

[New](#) [Save](#) [Delete](#) [Close](#)

## maintain project information

Please enter the project details below and click Save. Depending on the Type of Project and Type of Intervention further information should be provided in the new section(s) that will appear once the project details have been saved

### project details

Project ID: 0000000064 Project Manager:

Project Title:

Type Of Project\*:  Project  Research Type Of Intervention\*:  Mitigation  Adaptation

Lead Organisation\*:  Lead Partner(s):

Funding Organisation\*:  Funding Partner(s):

Host Organisation\*:  Funding Status:

Status\*:

Estimated Budget Range ZAR (Lower):  Estimated Budget Range ZAR (Upper):

Start Year\*:  End Year\*:

Description\*:

Web Link or Reference Source:

Contact Name:  Contact Email:

Note: Please note that Contact Name and Contact Email will be publically available

Only these Contact details are shown in the reports and searches

Some standard information is captured for all projects.

Depending on the Type of Project and Intervention additional information is gathered. The appropriate options are displayed once the project has been saved.

### mitigation project detail

Project Type	Project Sub Type
<a href="#">Edit</a> EE Households	

### additional mitigation project detail

If the project is located in more than one location, please add a separate entry for each location.

[Add new location](#)

Province	Metro/District Municipality	Local Municipality	City
<a href="#">Edit</a> Western Cape	Cape Town Metropolitan Municipality (CPT)		

[New](#) [Save](#) [Delete](#) [Close](#)



# add/maintain projects (3)

[Save](#) [Delete](#) [Close](#)

## mitigation project details

Project Type\*: EE Households

Project Sub-Type: -Select-

Host Sector\*: Energy

Sub Sector\*: Other Sectors

Sub Sub Sector\*: Residential

Does Project Generate Carbon Credits?\*: yes

Type of Carbon Credits: CDM

If voluntary, alternative questions will appear below

### Clean Development Mechanism(CDM) Project

CDM Status: Registered

CDM Approved Methodology: AMS-I.C.

CDM Project Number: 0079

Only CDM projects which are registered or at validation should be included.



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# current statistics



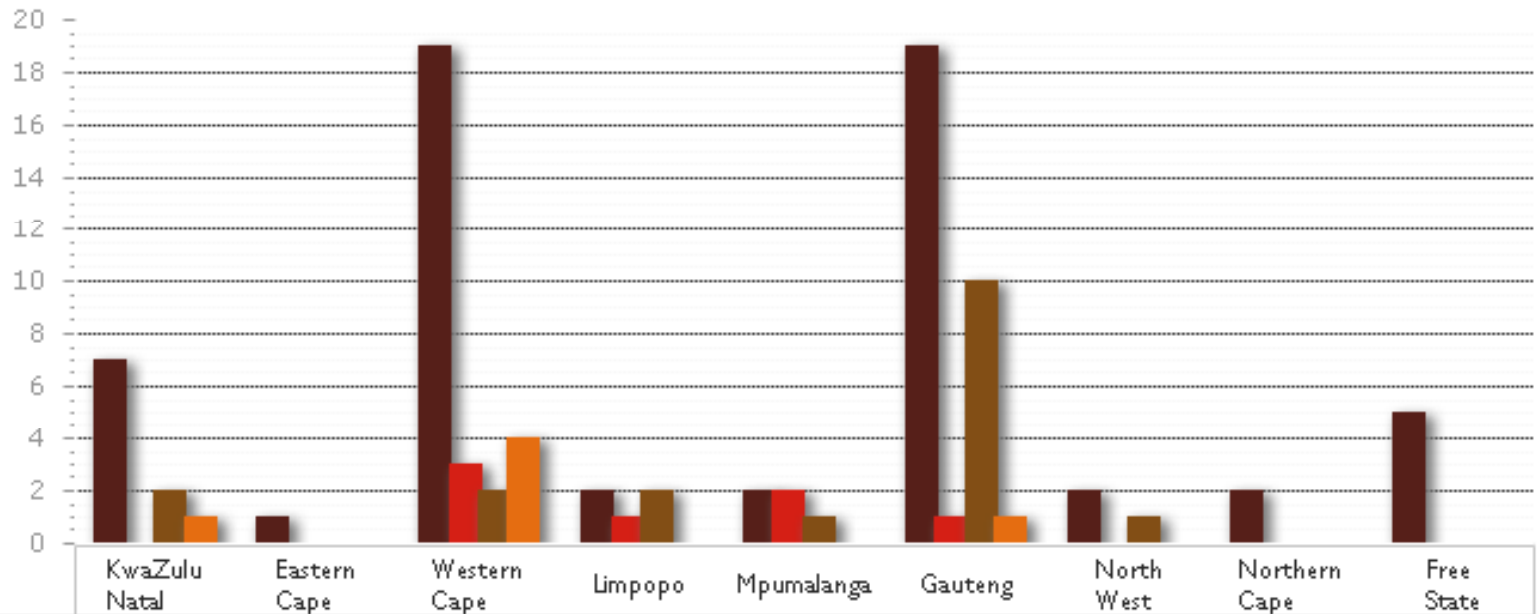
# number of interventions

- 90 projects
  - 59 Mitigation
  - 7 Adaptation
  - 18 Research (mitigation)
  - 6 Research (adaptation)
- 7 complete
- 49 operational
- 34 under development



# number of interventions

## number and type of climate interventions by province

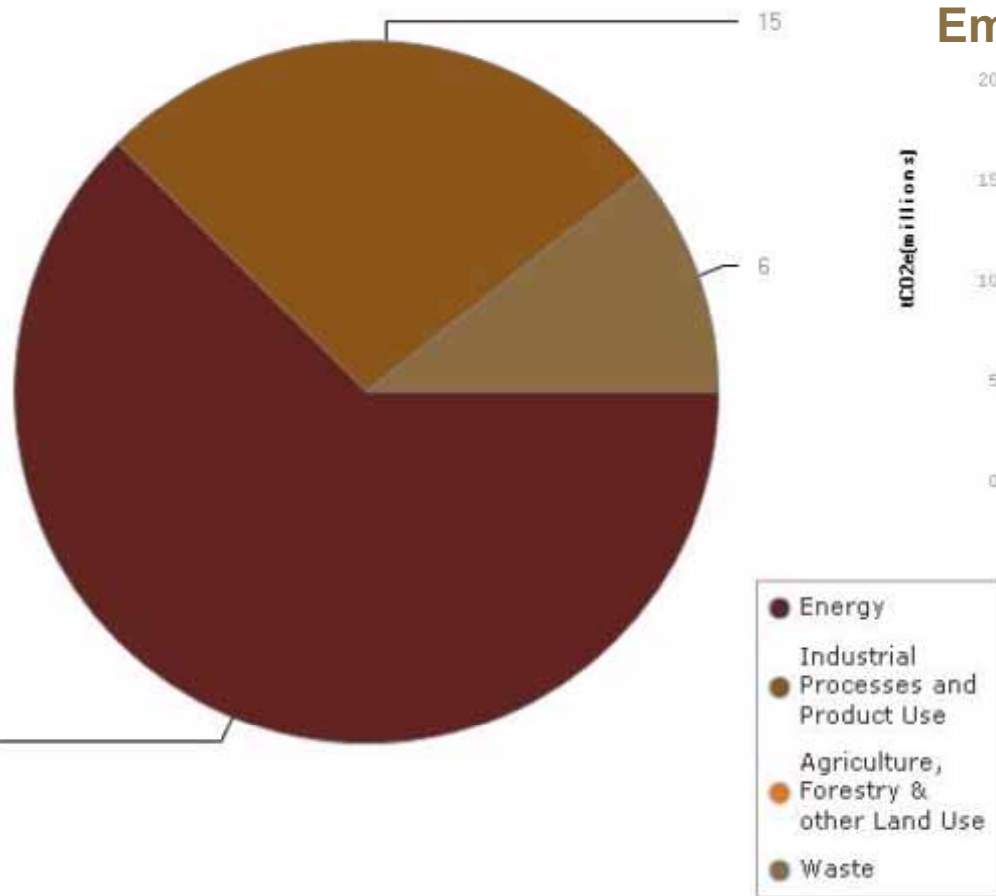


	KwaZulu Natal	Eastern Cape	Western Cape	Limpopo	Mpumalanga	Gauteng	North West	Northern Cape	Free State
Mitigation	7	1	19	2	2	19	2	2	5
Adaptation	0	0	3	1	2	1	0	0	0
Research-Mitigation	2	0	2	2	1	10	1	0	0
Research-Adaptation	1	0	4	0	0	1	0	0	0

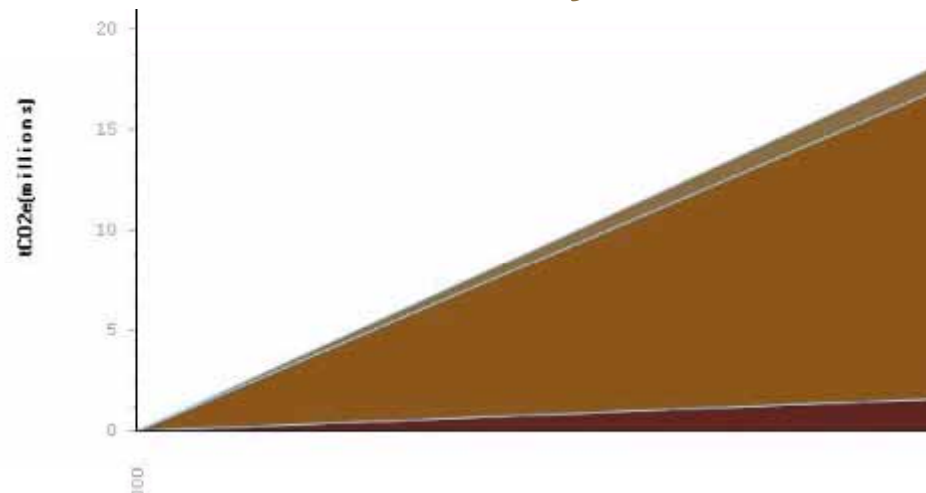


# mitigation projects (1)

## Climate Change Mitigation Projects by Sector



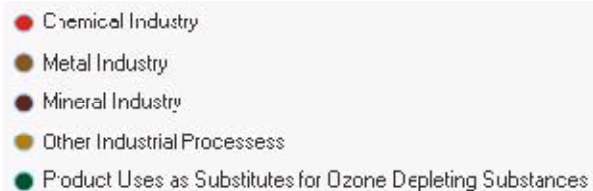
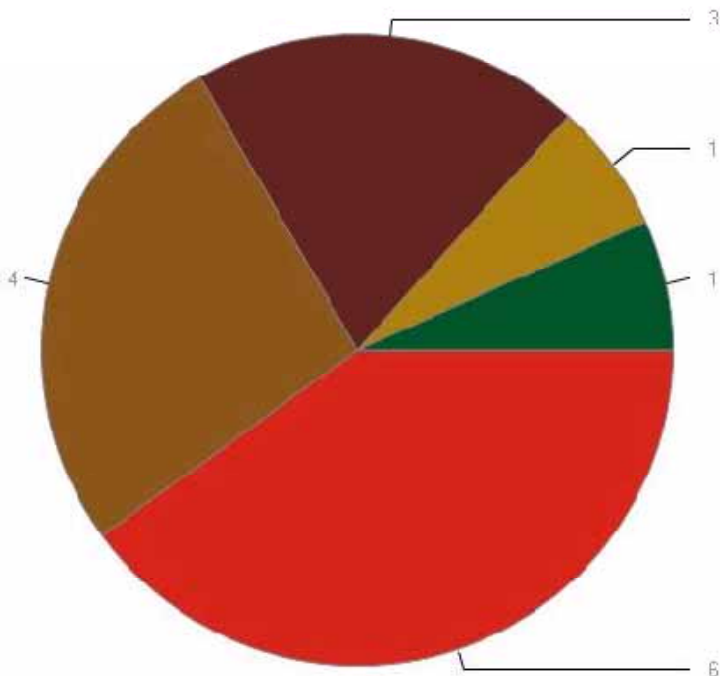
## Emission reductions by Sector



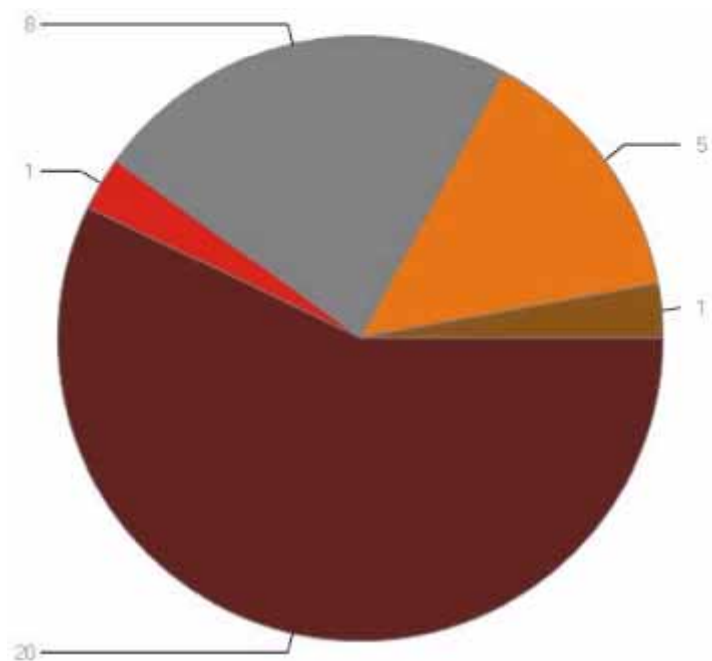


## mitigation projects (2)

### Mitigation projects - Industrial Processes and Product Use Sector



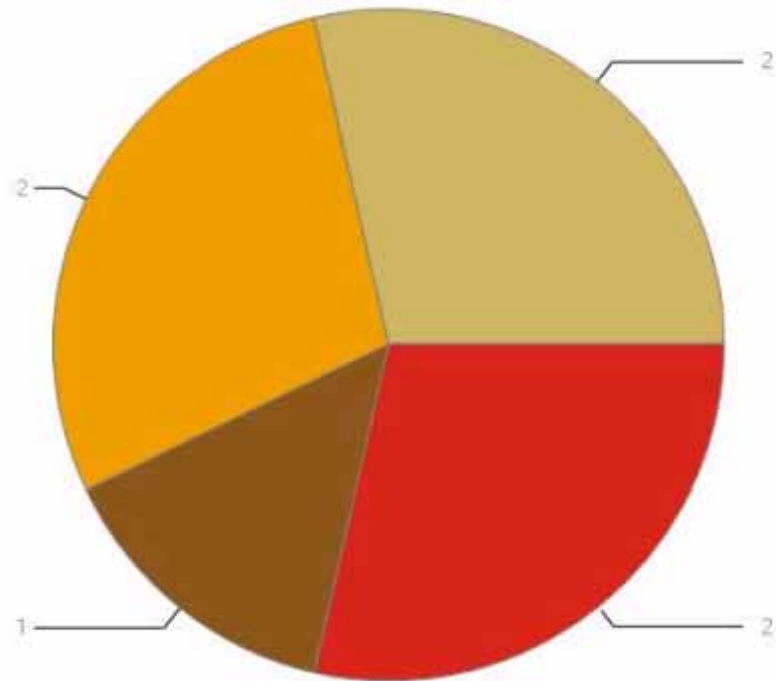
### Climate Change mitigation projects in the energy sector



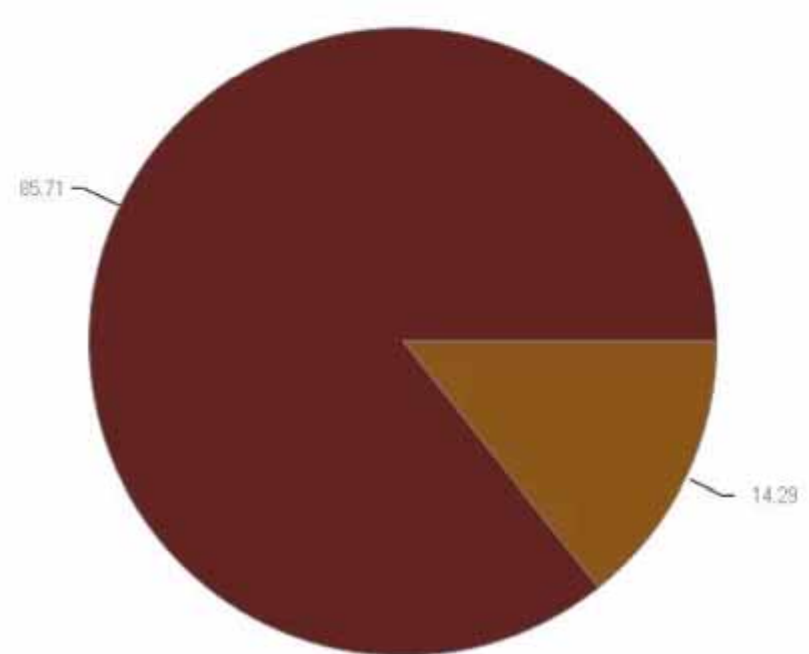


# adaptation projects

## Climate Change Adaptation Projects By Sector



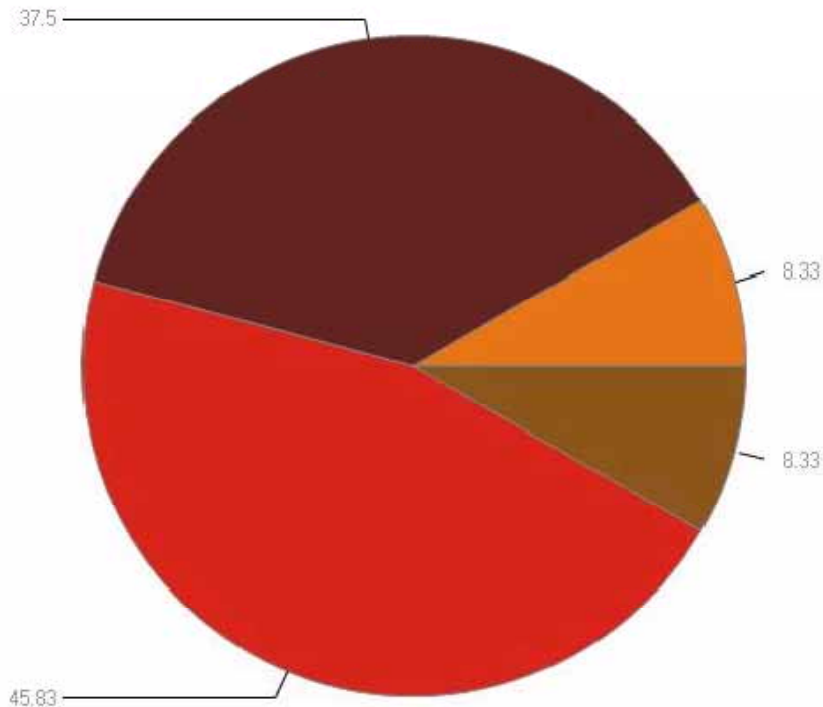
## Climate Change Adaptation Projects By Purpose



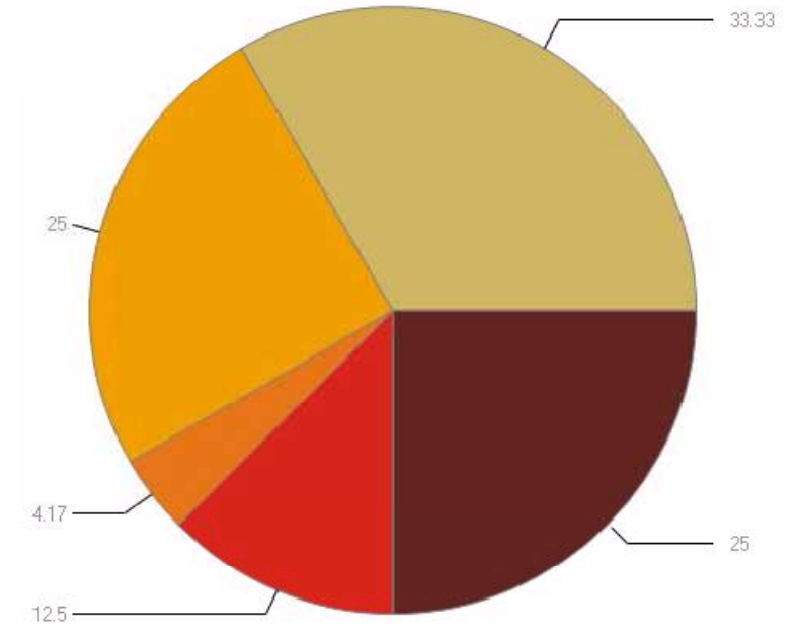


# research projects

## Climate Change Research Projects by Type



## Climate Change Research Projects by Target Audience



- Academics
- Commercial
- General Public
- Industry
- Policy Makers

- Economic and market impacts
- R&D
- Scientific
- Social



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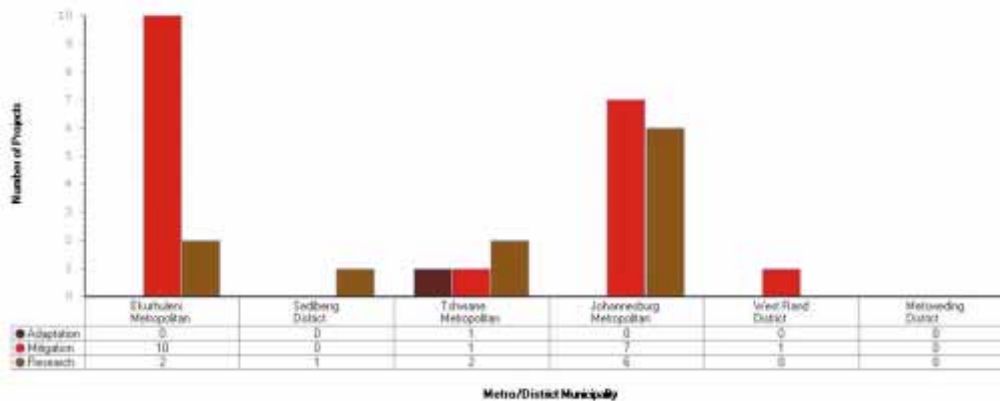


# Challenges



# lack of data (1)

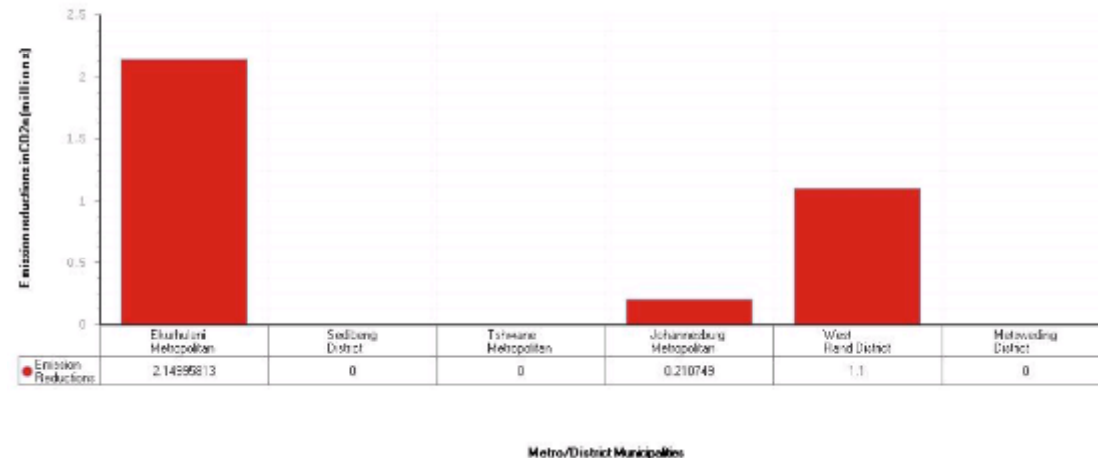
## Gauteng Climate Change Interventions



Lack of data for mitigation projects in Johannesburg means emission reduction data is not representative of actual activity

Similar problem across country

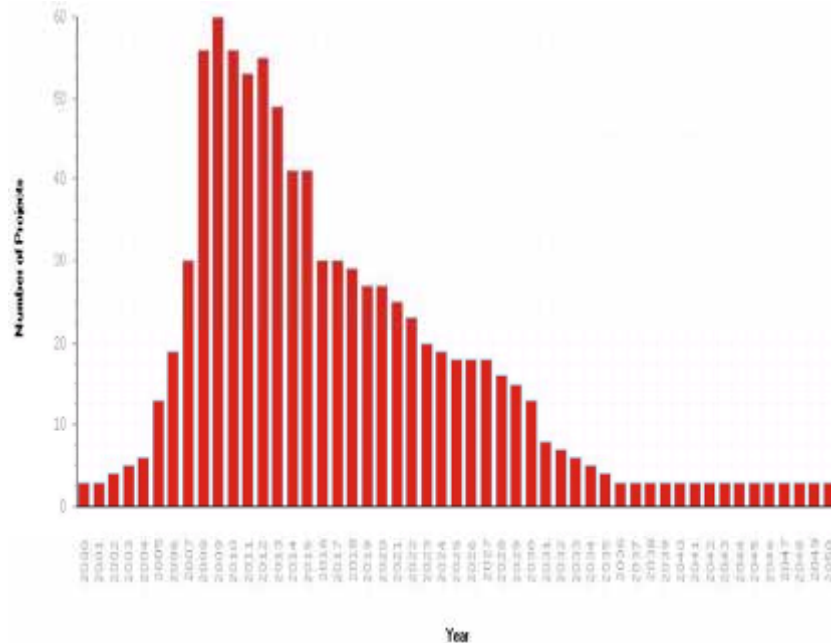
## Gauteng Emissions Reductions



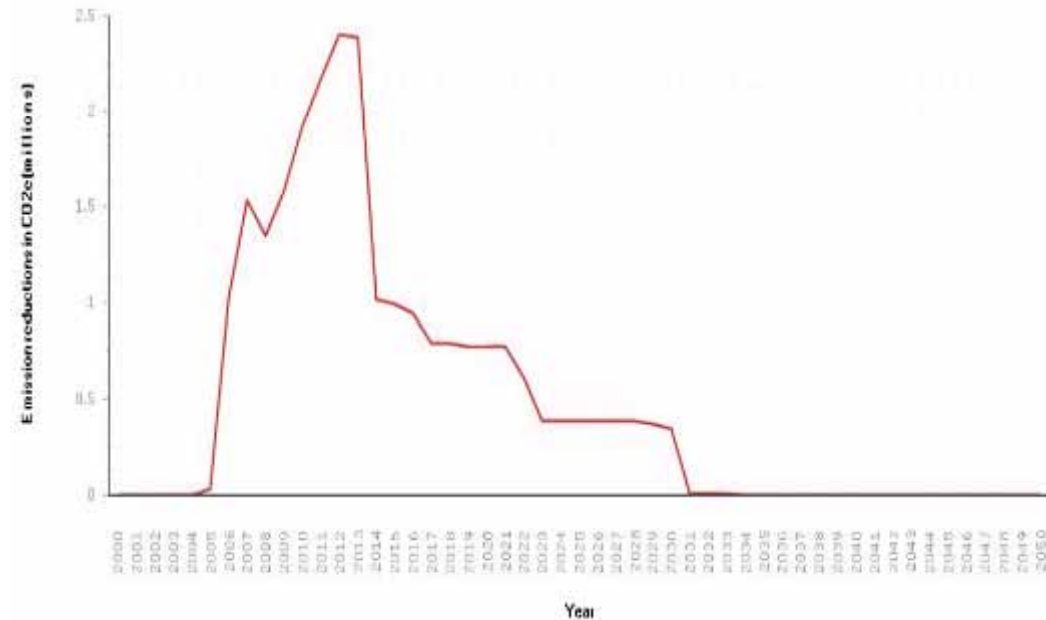


# lack of data (2)

## Number of Interventions by Year



## Total quantity of CO<sub>2</sub>e reduced each year



28 out of 59 projects report emissions reduction data  
Data only covers next 10-20 years



## where are we now...

- as you have seen –
  - we have the system
  - you have the information
  - Register your projects



**thank you**

access the database at: [www.nccrd.org.za](http://www.nccrd.org.za)

for further information, please contact

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