

Using the Lessons Learned from the Business Case Project to Leverage Resources for Air Quality Management Functions

10th Air Quality Governance Lekgotla
Session: 2.1



Climate Change and Air Quality



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Ms Elizabeth Masekoameng
10th Air Quality Governance Lekgotla
President Hotel, Bloemfontein
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Content

The AQMP support programme

- AQMP development
- AQMP quality
- AQMP implementation – the business case project

The business case e-tool

AQMP IDP Integration

Way forward



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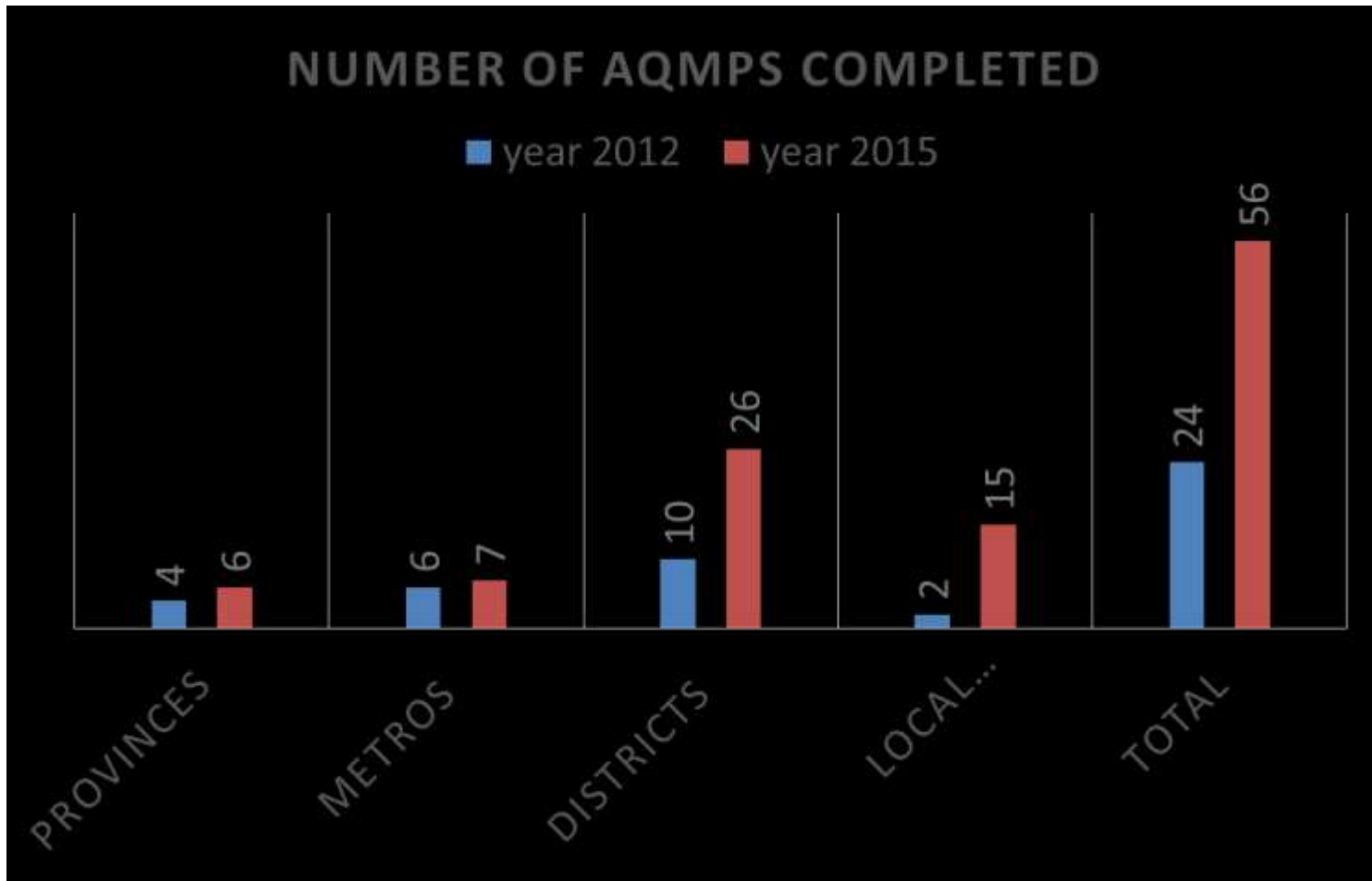


AQMP Support Programme 2011

- Aim of the support programme was to ensure effective implementation of section 15 of NEM: Air Quality Act (AQA)

AQMP support goal	AQA Section	DEA intervention
Encourage municipalities to develop AQMPs	S.15	AQMP training
Improved quality of AQMPs	S.16(a)	AQMP manual, training, AQMP support staff, templates, evaluation checklist
Assist in implementation of AQMPs *	S.16(b)	The business case – Resource requirements

AQMP Development - Progress



AQMP Implementation

- ❑ Resources required – “instruments for implementation of AQMPs”

TECHNICAL RESOURCES & TOOLS

- Ambient air quality monitoring stations
- IT resources
- Planning tools (SOPs and manuals)
- Air quality by -laws

Financial resources



HUMAN RESOURCES

- Adequate number of personnel
- Adequate knowledge and skills

Financial resources



RESOURCES FOR OTHER OPERATIONS

- Maintenance of monitoring equipment
- Coordination of air quality matters
- Training of officials
- Travelling

Financial resources



ACQUIRING FINANCIAL RESOURCES FOR AQMP IMPLEMENTATION



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Limitations of AQMP Manual

- Does not provide guidance on how to include resource requirements during AQMP development
- Hence the Business Case E- tool was developed to assist in determining the financial requirements



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Business Case e-Tool

- Microsoft Excel Based
- Calculates the human resources requirements, identifies technical tools required and calculates the financial requirements for both
- Based on specific scenario applicable to the municipality/province



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Developing Scenarios for the Tool

- ❑ Characterisation of municipalities and provinces (4 Workload indicators)
 - Number of listed activities managed
 - Number of monitoring stations to be maintained
 - Number of section 23 activities
 - Number of other air quality issues to be managed (domestic burning, biomass burning, vehicle emissions etc.)
 - Oversight and coordination (Provinces only)



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Business Case e-Tool

□ Background calculations are based on the following:

- Workload assessments (How long it takes to undertake specific AQ functions)
- Prices of procuring monitoring stations, portable equipment's, development of by-laws, etc. were based on year 2014 quotations
- The cost of maintaining stations per year was obtained from authorities

- Management of listed activities
- Management of monitoring stations
- Management of section 23 activities
- Management of other air quality issues



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The Business Case Tool

Input data

Defining the Authority	Value		
Authority Grouping	Group B		
Authority Type	District		
Air Quality Issues	Minimum	Maximum	
Number of Listed Activities (Section 21 Activities)	40	79	<i>Between 40 and 80 Listed Activities</i>
Number of Section 23 Activities - Contolled Emmitters	100	Above 100	<i>Less than 400 Section 23 Activities</i>
Number of other Pollution Sources	3		<i>(i.e. Vehicle emission, domestice burning, biomass etc)</i>
Ambient Air Quality Monitoring Stations	Minimum	Maximum	
No of Monitoring Stations	5	Above 5	Equal or More than 100 Section 23 Activities



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The Business Case Tool Outputs

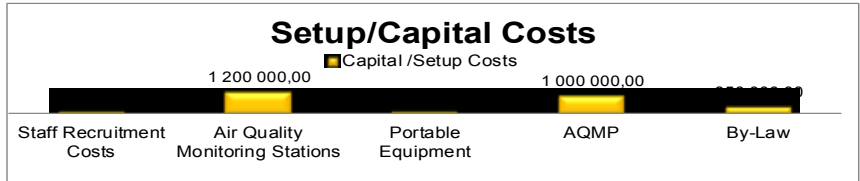
Human Resources

Position	Minimum Quantity	Maximum Quantity	
AEL Management and Reporting	3	7	Relevant Environmental, Environmental Health or Natural Science Degree, Process
Compliance Monitoring	4	7	Relevant Environmental, Environmental Health or Natural Science Diploma
AQ Strategy/Planning and Implementation	2	2	Relevant Environmental, Environmental Health or Natural Science Diploma
AQ Monitoring and Information Management	2	2	Relevant Environmental, Environmental Health or Natural Science Diploma, Information Technology
TOTAL PERSONELL REQUIRED	7	11	

HR

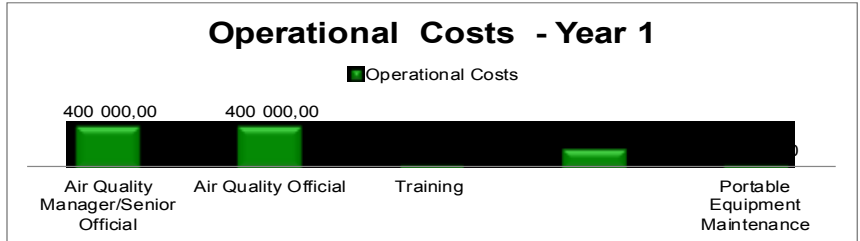
Financial Resources

Capital /Setup Costs	
Staff Recruitment Costs	22 000,00
Air Quality Monitoring Stations	1 200 000,00
Portable Equipment	95 000,00
AQMP	1 000 000,00
By-Law	350 000,00
TOTAL CAPITAL/SETUP COSTS	2 667 000,00



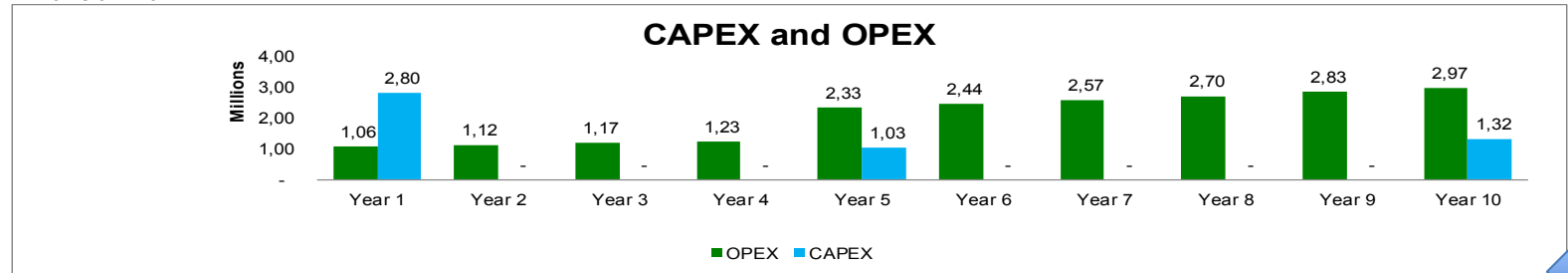
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Operational Costs	
Air Quality Manager/Senior Official	400 000,00
Air Quality Official	400 000,00
Training	20 000,00
Air Quality Monitoring Stations Maintenance	180 000,00
Portable Equipment Maintenance	14 250,00
TOTAL OPERATIONAL COSTS	1 014 250,00

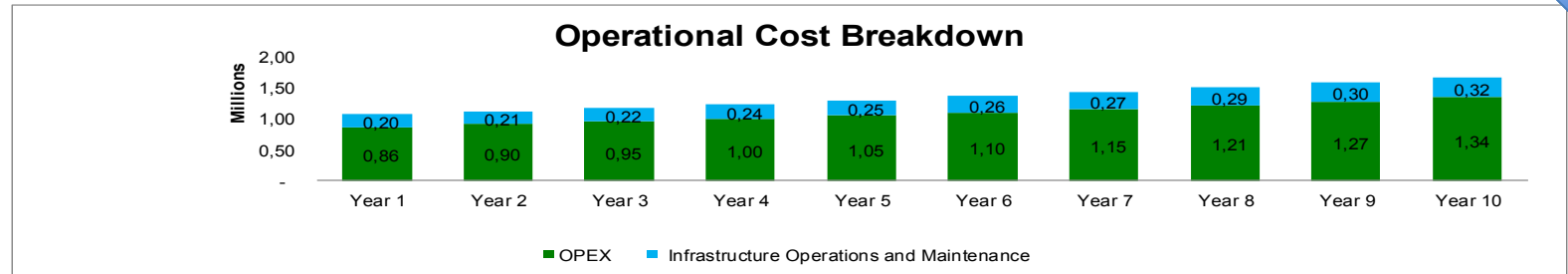


Capital /Setup Costs	2 667 000,00
Operational Costs	1 014 250,00

Financial Plan



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Business Case e-Tool

- The tool can be used:
 - During AQMP development
 - At any time during implementation
 - Can be used even when there is no AQMP

- Figures can be used to motivate for funding

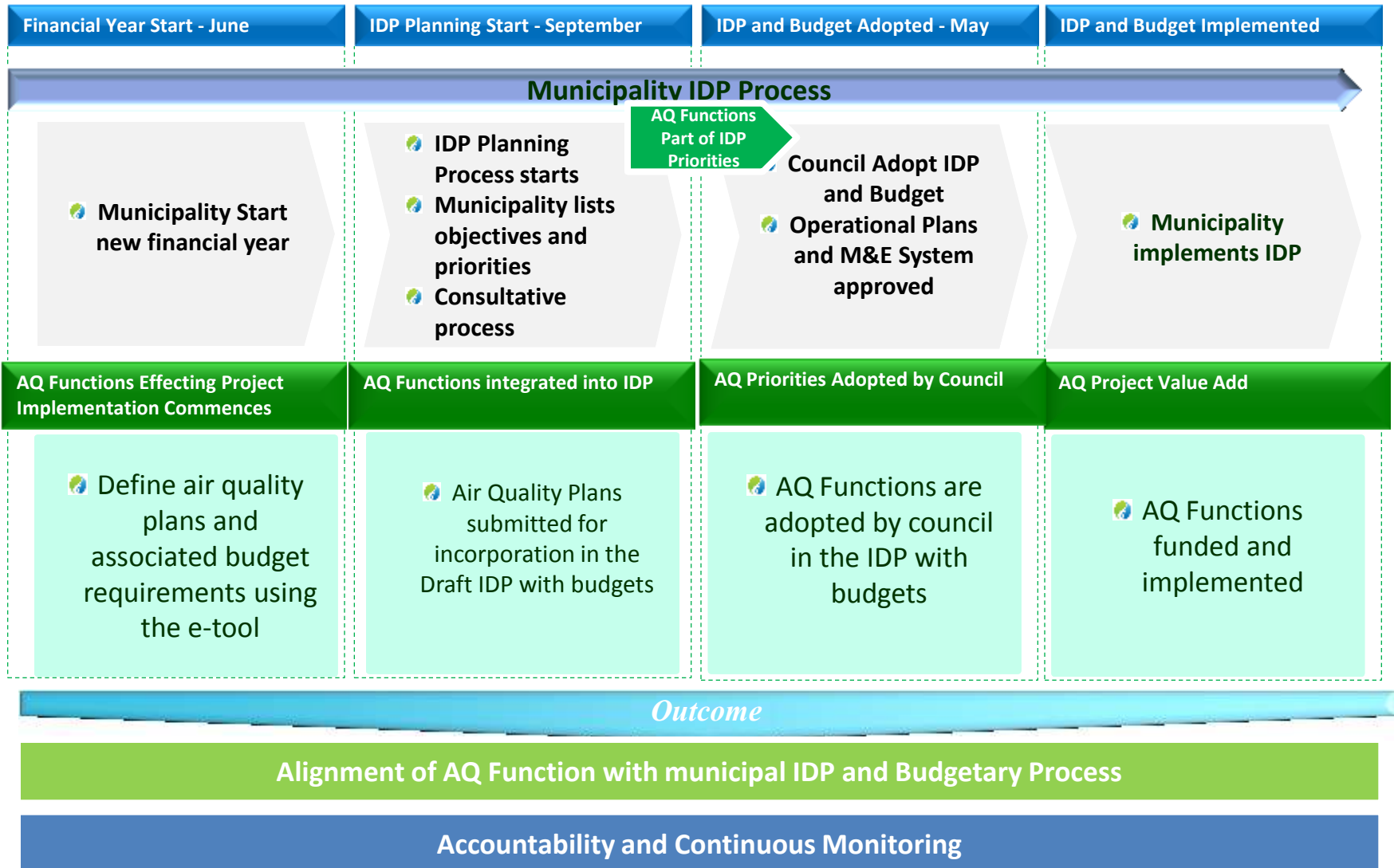


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AQMP IDP Process Integration



Breakaway Discussions

- ❑ How to optimise the use of the business case tool
- ❑ What would complement the tool
- ❑ How do we sell air quality to principals, management and key people involved in municipal budgeting process.
- ❑ Best practices and learnings from other best performing municipalities.
- ❑ Recommendations

Mail Online

Bottled AIR: Chinese multimillionaire sells EIGHT MILLION 80-cent cans of fresh air in TEN DAYS as pollution levels climb to record highs

By REUTERS REPORTER and DAILY MAIL REPORTER

PUBLISHED: 16:30 GMT, 1 February 2013 | UPDATED: 06:12 GMT, 1 February 2013



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View comments

Across the street:

Cans of fresh air are up for sale in China as a multimillionaire looks to capitalize on the country's foulest fortnight for air pollution in memory.

Chen Guangbiao, who made his fortune in the recycling business and is a high-profile philanthropist, is selling soda pop-sized cans of air, purportedly from far-flung, pristine regions of China such as Xinjiang in the northwest to Taiwan, the southeast coast. He says 10 million cans have sold in the last 10 days as pollution levels climb to record highs.

'I want to tell mayors, county chiefs and heads of big companies: don't just chase GDP growth, don't chase the biggest profits at the expense of our children and grandchildren and at the cost of sacrificing our ecological environment', Chen said.



Ms. Elizabeth Masekoameng

Tel: 012 399 9201/ 2

Email: EMasekoameng@environment.gov.za

AQMP Team

Mr Caesar Nkambule

Ms Ramaisela Ramushu

Mr Selby Lukhele



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