



Climate Change
and Air Quality

Implications of Certification Scheme under the Air Quality Legislative Framework

NACA North West and Northern Branches Seminar
25 July 2019, NMISA Gas Laboratories



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Presentation Outline

- Background
- Emission monitoring system (framework)
- Certification as a quality management instrument
- The role of ETCert in implementation of AQA
- Status of the norms and standards for emission monitoring
- Conclusions

Objective

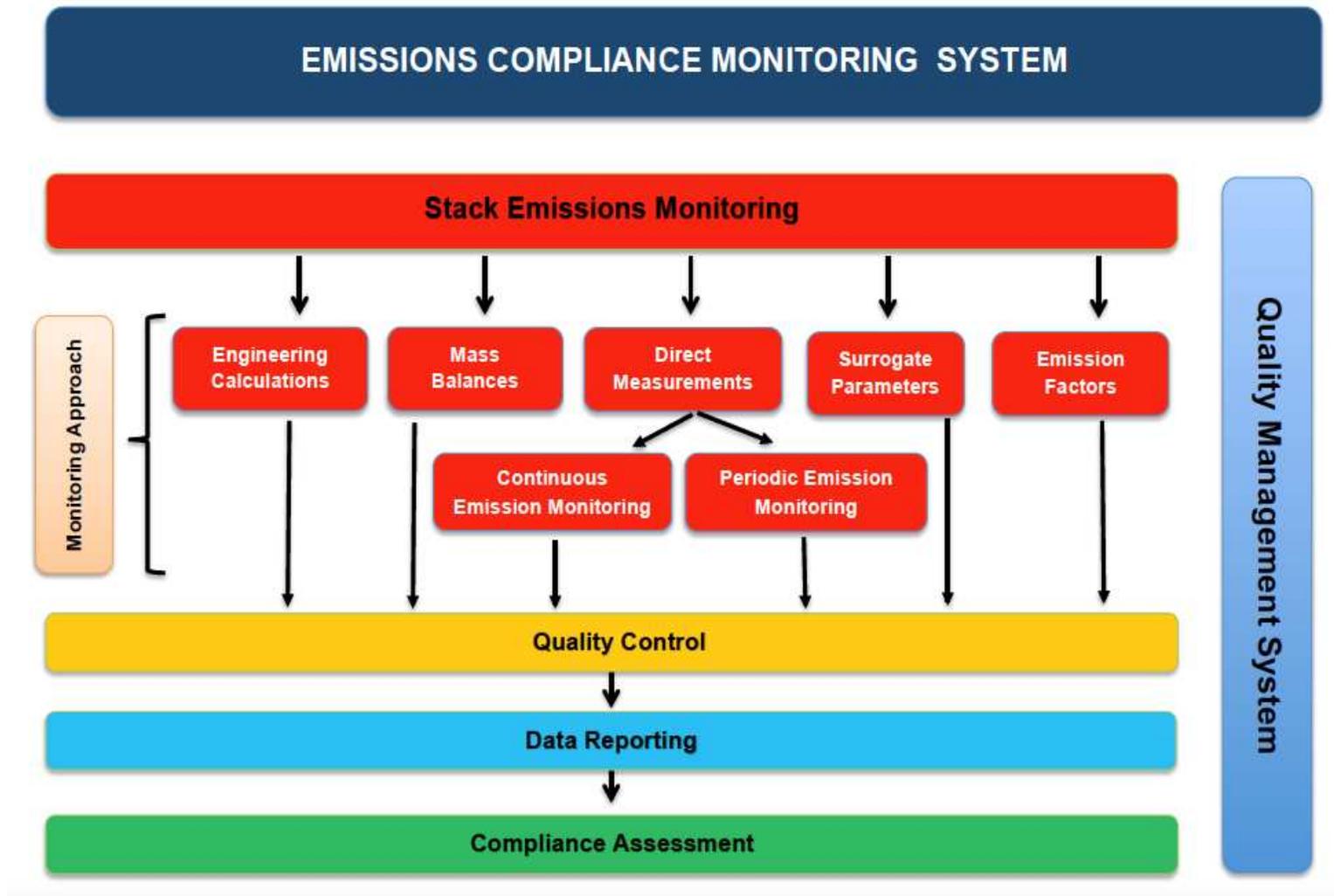
The purpose of this presentation is to:

- Certification under the AQA framework for emission monitoring under development,
- Update on the status of the draft Norms and Standards for Emission Monitoring in terms of the National Environmental Management: Air Quality Act, 2004.

Emission monitoring system framework

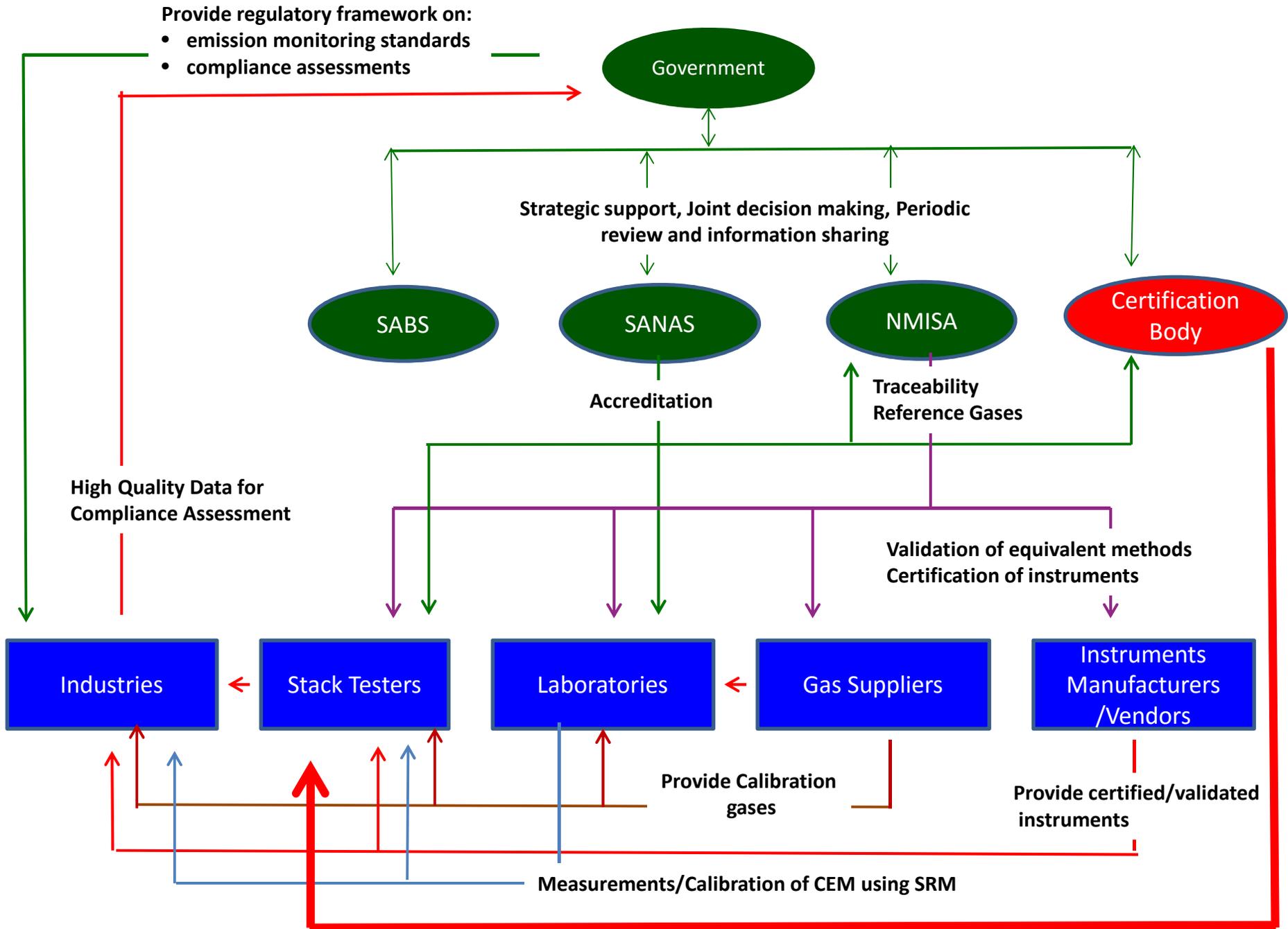
- The Department has, since 2015, embarked on a process to establish norms and standards for emission monitoring, aimed at:
 - provision of general requirements for emissions monitoring required for the purpose of demonstrating compliance with emission standards promulgated in terms of the National Environmental Management: Air Quality Act (Act No. 39 of 2004) (“the AQA”).
- The document prescribes processes, procedures and protocols that should be followed when conducting emission measurements and monitoring; accreditation of laboratories; and possible certification of personnel conducting stack emissions measurements and monitoring.

Emission monitoring system framework



Emission monitoring system framework

CHAPTERS	FOCUS AREAS	REFERENCE TO STANDARDS
Emissions measurement Planning	<ul style="list-style-type: none"> • Measurement site selection • Measurement Objectives • Safety 	EN 15259
Monitoring Approaches	<ul style="list-style-type: none"> • Continuous Emissions Monitoring and Periodic Testing 	Legislation
Quality Control	<ul style="list-style-type: none"> • Use of validated methods (prioritization) • Alternative equivalent methods • QA of Continuous Emission Monitoring Systems • Performance standards for portable instruments 	prEN 14793 EN 14181/ EN 13284-2
Quality Assurance	<ul style="list-style-type: none"> • SANAS Accreditation • Certification of Personnel • Use of certified instruments 	ISO 17025; CEN/TS 15675; ISO 17024
Compliance Assessment Procedures	<ul style="list-style-type: none"> • Measurements interpretation • Data correction • Templates for reporting 	Legislation



Certification as a quality management instrument

- Envisaged quality management system for emission measurements dependent on collaboration between various statutory and non-statutory bodies.
- NEM: AQA requires laboratories/stack testing bodies to be SANAS accredited.
- Limitations on the scope of accreditation per SANS/ISO 17025 has resulted in establishment of certification schemes (e.g. UK Mcerts) to manage quality components outside the scope of accreditation, as well as to support accreditation:
 - Personnel competency for stack testers
 - Instruments performance validation

The role of ETCert in implementation of AQA

- Certification of personnel is one of the internationally recognized scheme providing assurance of capacity to produce emission data of required quality (regulator and regulated community) .
- Currently, no statutory certification scheme in place, hence government's interest in the ETCert Scheme established by NLA- STAC
- ETCert is envisaged to provide an *independent, voluntary* competency assessment and certification; and level a playing field for stack testers in South Africa (*in the absence of a statutory scheme*), thus provide a *much needed layer of confidence in emission data*.

The role of ETCert in implementation of AQA

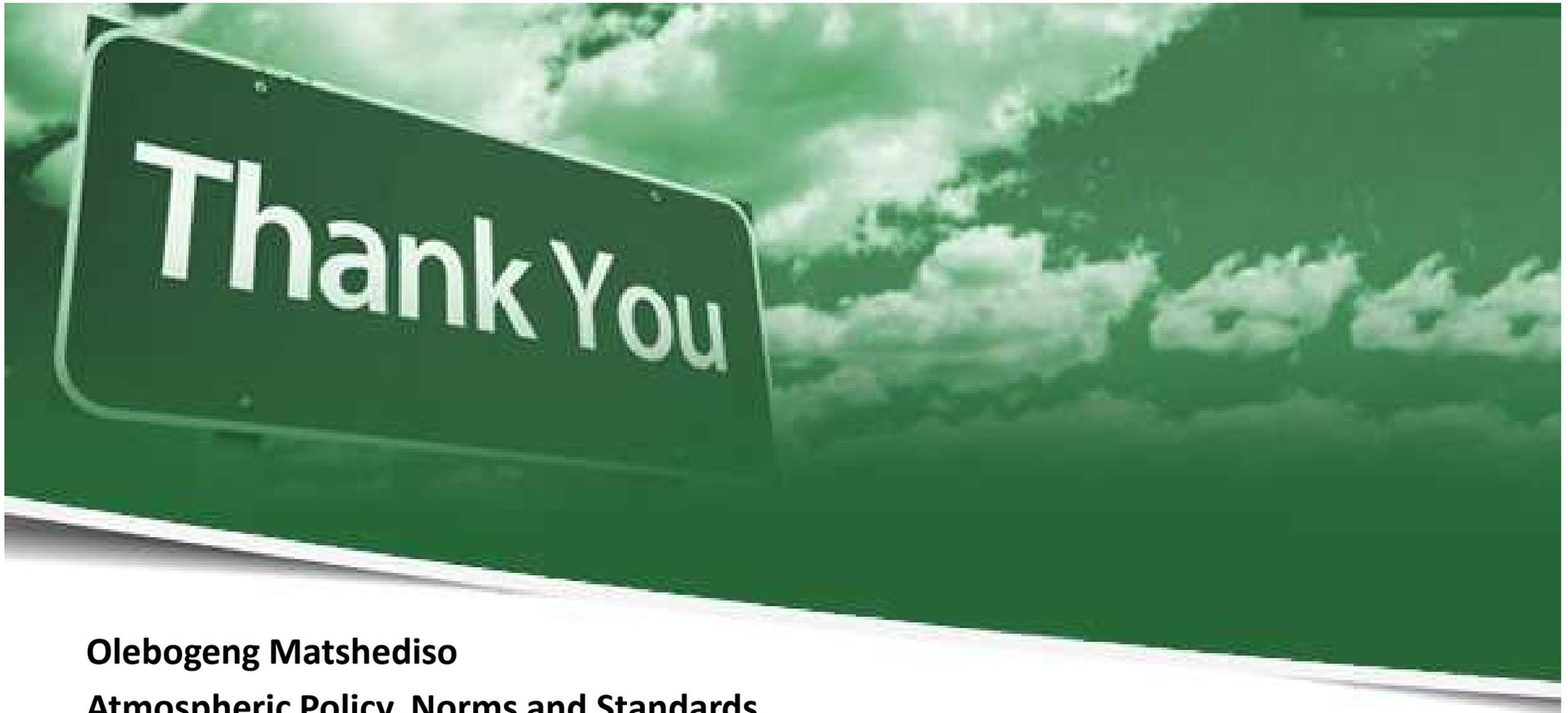
- ET Cert is encouraged to:
 - Collaborate with government to establish competency norms that are traceable to best practices and standards of performance (quality)
 - Be independent, and contribute to professionalization and growth of the sector by creation of a transparent and fair competitive environment for all players (inclusion of previously disadvantaged).
 - Work towards being accredited as a certification body; which will bring it close to similar international schemes.

Status of the norms and standards for emission monitoring

- The work to finalize and publish the norms and standards is on-going.
 - The department has published a list of updated methods on 25th May 2018.
 - Guidance provided to SANAS on which supplementary requirements to support generic ISO 17025 process.
 - Participation in the establishment of NLA- ETCert Scheme (VOLUNTARY system).
 - The department will decide whether there is a need for a statutory body in future, after considering all options.
 - Establishment of compliance reporting module under the SNAEL (Standardize emission reporting and replace manual emission reports).

Conclusion

- The establishment of the emission monitoring system, prescribing how emission measurements must be carried out is beneficial for the implementation of emissions control legislation.
- Effective implementation of this system depends on the collaboration of the regulator, the national technical infrastructure and non-statutory bodies.
- ETCert scheme is envisaged to be an active partner in the production of credible, reliable emission measurement data to support the implementation of the AQA.



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