Broader goal (links to external/high level commitments)

Improved resilience of community and business to climate change, environmental hazards and risks (OEH Corporate Plan and NSW Climate Change Policy Framework)

Improved air quality across NSW (Clean Air for NSW Consultation Paper)

Strengthened air quality management to reduce air pollution and exposure in New South Wales (National Clean Air Agreement)

End of program outcome (4 years +)

Intermediate outcome (2-4 years)

Immediate outcome (annual reporting cycle)

Greater protection for the people of New South Wales from air pollution

Communities use air quality information to take preventative action to minimise personal exposure

End users are aware of the significance of local air quality issues

Enhanced amenity and liveability outcomes for New South Wales

End users know how to use air quality information for risk assessments and cost benefit analyses

The community, government and business decision makers have access to the right information, at the right time and at the right scale

Enhanced evidence of air quality impacts enable improved decisions on environment and public health outcomes

The community and policy investigators use air quality science information in decision and policy making

Enhanced stakeholder engagement and collaboration on air quality science and management

### Outputs

products/services/ deliverables

Activities Key activities that will be completed

Activity categories

Foundational capabilities

Advisory services and communications on air quality issues

AQMNs established and fully operational Air quality data, information and reports

Air quality website
as central data
and information
orts
delivery platform

Air quality forecasting system for NSW Automated air quality messaging system Risk assessment on special incidents Current population exposure, social and economic impacts of air pollution

Sources ranked by impact

Monitoring and assessment methods Projected air quality and public health benefits of proposed interventions

• Establish and maintain NSW's air quality monitoring networks

Monitor, map and forecast air pollution

- Undertake monitoring at hotspot road corridors
- Undertake auditing activities
- Data validation and interpretation
- Model and map air quality in NSW
- Undertake short-term air quality forecasting

- population

   Measure economic cost and social burden of air
  - Measure economic cost and social burden of all pollution on NSW
  - Measure impacts of pollution on vegetation in NSW

Impacts of air pollution

· Measure health impacts of air pollution on the NSW

Analyse source contributions

Evaluate and model intervention scenarios

- Evaluate and model air quality-climate change interactions
- Build knowledge and understanding of clean air technologies

Improved air quality

#### Ambient monitoring

- Routine network-based meteorology and air quality monitoring
- Tier 2 networks (DustWatch)
- Advanced measurement techniques
- Specialised monitoring for incidental emissions and hot-spots

#### Quality management

- NATA accreditation
- Instrument calibrations
- Auditing
- QualityManagementSystem

## Data acquisition, storage and web-publishing

- Database management systems, including in-house applications
- Web content management

#### Air quality forecasting framework

# Data interpretation and advisory services

- Data interpretation tools and platforms
- Periodic reporting
- Expert advice (e.g. air quality impact assessments, incident reporting)

#### Modelling

- Meteorological models
- Chemical transport models
- Exposure risk and health improvement modelling
- Air emissions modelling

### Leadership

- Community engagement (Citizen Science)
- Guiding and collaborating on external programs
- Strategic delivery partnerships

Program scope

Understand current air quality and its impact, how it has changed over time and is likely to change into the future