



CLIMATE & CLEAN AIR COALITION

TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

NIGERIA'S SNAP PROJECT

DELIVERING MULTIPLE BENEFITS FOR CLEAN AIR AND CLIMATE

Bala Bappa
National Coordinator
SNAP/IS – Nigeria

Africa Assessment Meeting, Africa Climate Week, Accra, Ghana
March 2019



A. Highlights of Presentation

- Overview of the National Planning Process and Objectives
- Sources of Short Lived Climate Pollutants in Nigeria
- Emission Trends, priority mitigation measures, mitigation potentials and core benefits
- Next Steps in the Planning Process





B. Overview of the National Planning Process

- Signed PCA and started Implementing the SNAP/IS Project in June 2015, with the appointment of the National Focal Point.
- Established National SLCP Coordination Office in the Federal Ministry of Environment and appointed staff
- Identified and enlightened stakeholders from Line Ministries, NGOs, CBOs, Dev. Partners etc.
- Inaugurated Advisory and Task Force groups selected from above.
- Established SLCP desk offices in MDAs.
- Held regular Consultative Meetings.
- Nigeria currently active in several Initiatives: Cook Stoves; Oil & Gas; SNAP; Agriculture; Municipal Waste; Health; HFCs; Diesel and Bricks.
- Nigeria's NAP Document has been developed in consultations with National Key Stakeholders and Lead Partners - SEI, IUAPPA and UNEP-ROA.
- Implementation in progress.





C. Objectives

- Increase awareness, participation and commitment of stakeholders on SLCP issues.
- Support rapid and large-scale implementation of SLCP mitigation at the national level
- Set up desk offices to handle SLCP affairs in various stakeholder MDAs.
- Build a coordination mechanism among key stakeholders to implement recommended strategies of emission reduction in Nigeria.
- Develop analytical and assessment tools (LEAP - IBC).
- Develop and disseminate information on Best Practices to support the implementation of effective mitigation strategies.





D. Key Actions Included In The National Plan on SLCPs

- Establishment of Desk Offices in MDAs to coordinate SLCP issues for sustainability
- Mainstreaming of SLCP Mitigation into the National Planning Process
- Budgetary provision for MDAs to implement SLCP activities
- Legislative backing for the National Action Plan recommendations
- Monitoring, Reporting and Verification (MRV) coordinated by the Federal Ministry of Environment



NIGERIA



E. Main Sources of SLCPs at National Level: Black Carb

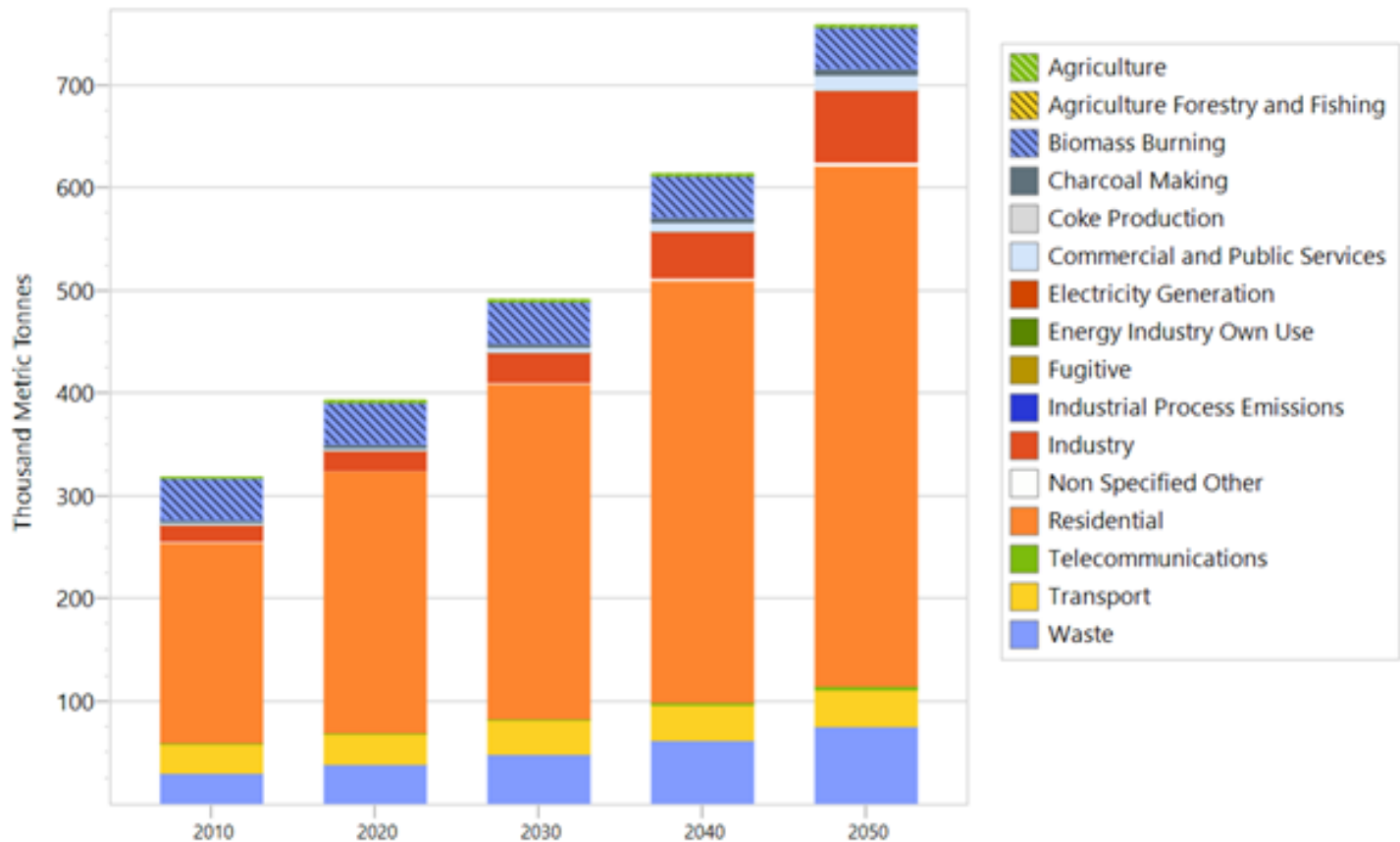


Fig.2.11: Nigeria: BC Emission Trend for 2010 - 2050





E. Main Sources of SLCPs at National Level: Methane

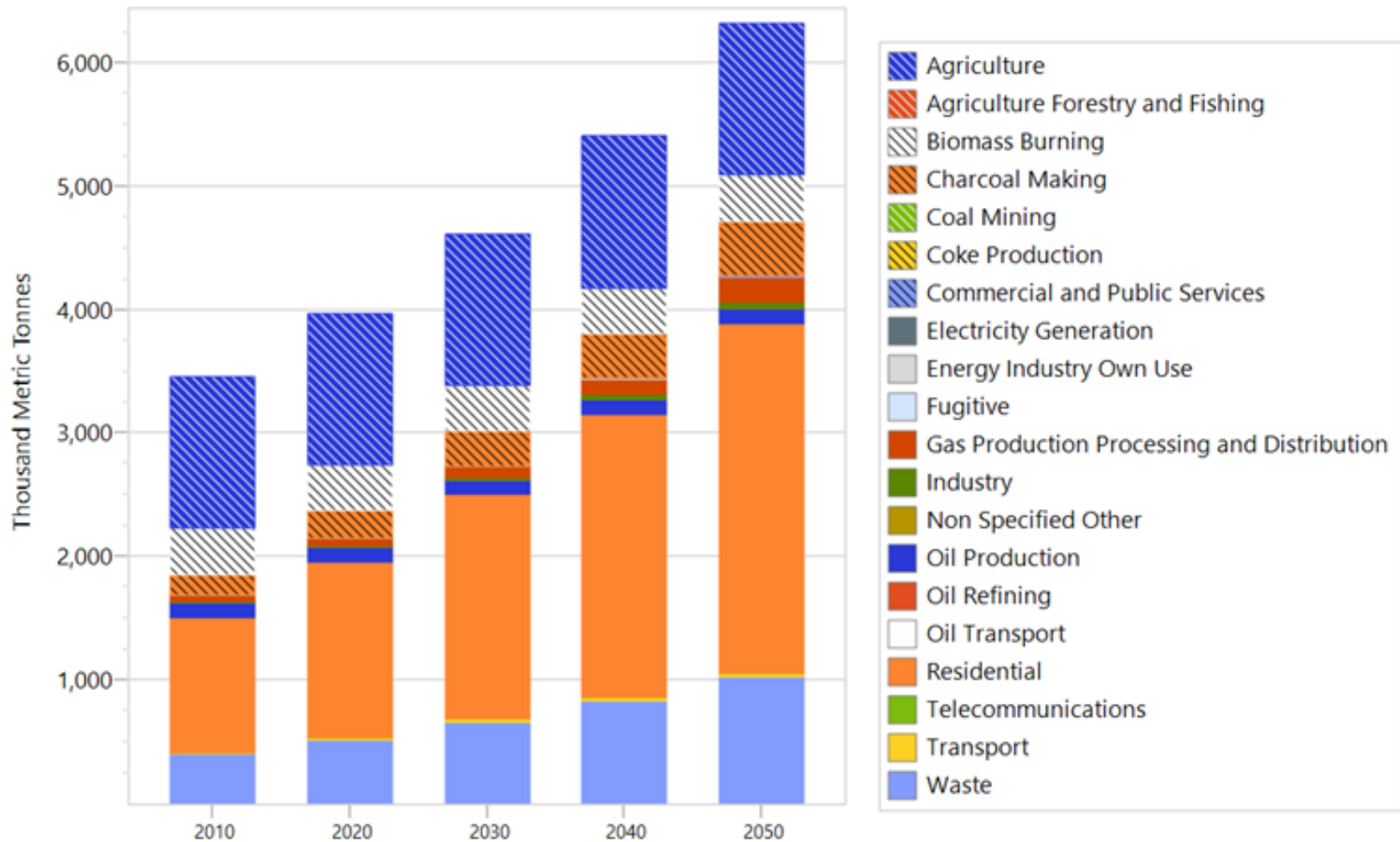


Fig.2.13: Nigeria: Methane Emission Sources and Trend, 2010 - 2050





E. Overview of Priority Mitigation Measures

	<i>Source Sector</i>		<i>SLCP Abatement Measures</i>
1	<i>Transport</i>	1	<i>Phasing out of high emitting vehicles</i>
		2	<i>Promotion of (CNG) Buses/Taxis</i>
		3	<i>Diesel and Petrol Low <u>Sulphur</u> Policy</i>
		4	<i>Euro III Emission Standard</i>
		5	<i>Euro IV Emission Standard</i>
		6	<i>Transport Modal Shifts</i>
2	<i>Residential</i>	7	<i>LPG for Cooking</i>
		8	<i>Improved <u>Cookstoves</u></i>
		9	<i>Policy Low <u>Sulphur</u> (Kerosene)</i>
3	<i>Oil & Gas</i>	10	<i>Flare-Out</i>
		11	<i>Fugitive emissions/leakages Control</i>
		12	<i>Methane Leakage Reduction</i>
4	<i>Industry</i>	13	<i>Efficient brick kilns</i>
5	<i>Waste Management</i>	14	<i>Waste Separation</i>
		15	<i>Landfill Methane Gas Recovery</i>
		16	<i>Septic Sludge Collection</i>
		17	<i>Sewerage Systems and Municipal Wastewater Treatment Plants</i>
6	<i>Agriculture</i>	18	<i>Intermittent Aeration (AWD)</i>
		19	<i>Stop open-field burning of Agriculture Waste.</i>
		20	<i>Anaerobic Digestion (AD)</i>
7	<i><u>Power</u> [Energy]</i>	21	<i>Expansion of National Electricity Coverage</i>
		22	<i>Solar Generators for Electricity</i>
8	<i>HFCs</i>	23	<i>HFC Consumption Reduction.</i>



NIGERIA



Substantial SLCP emission reductions from SLCP measures

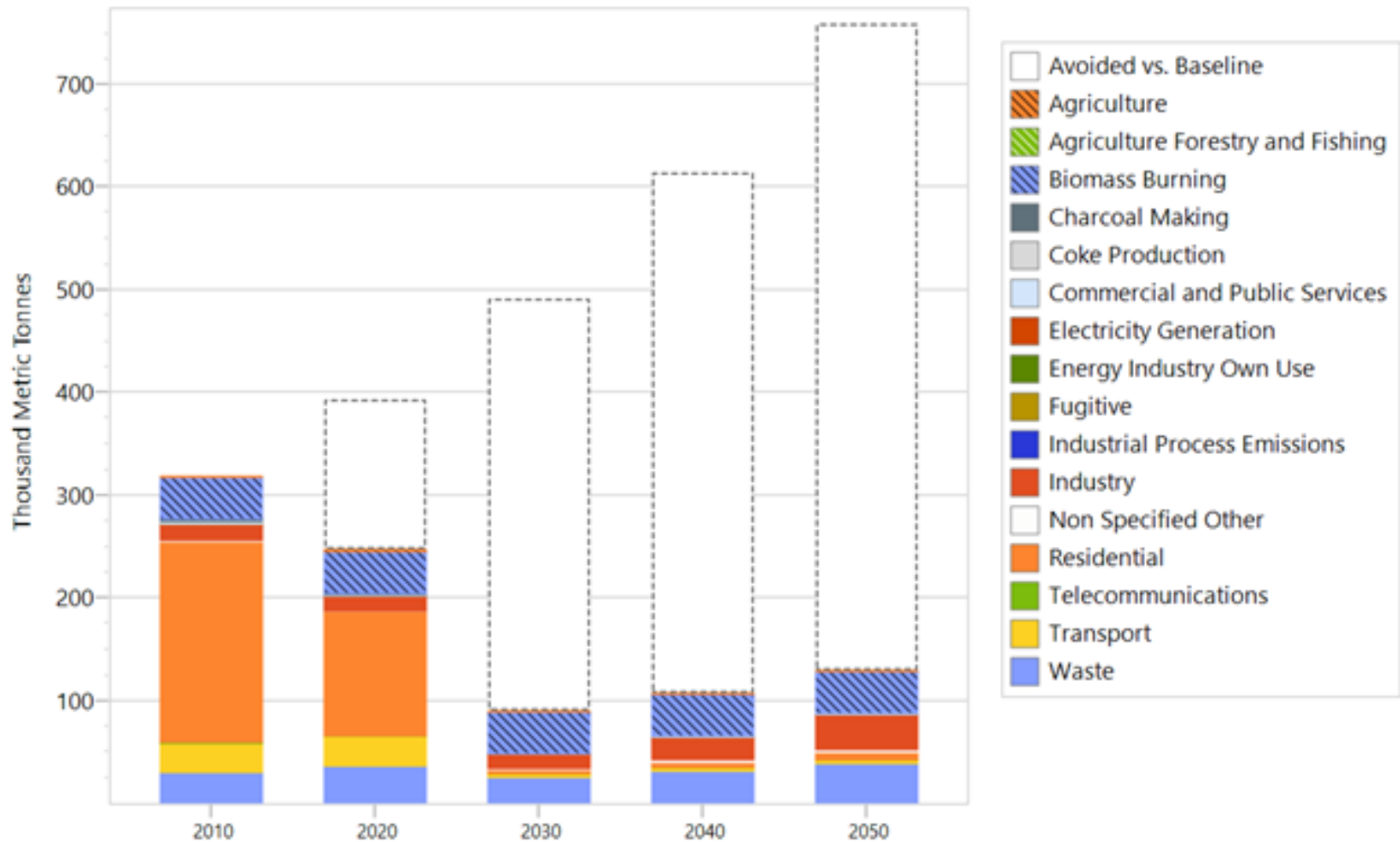


Fig 3.1: Black Carbon Emission Savings.

NIGERIA



Substantial SLCP emission reductions from SLCP measures

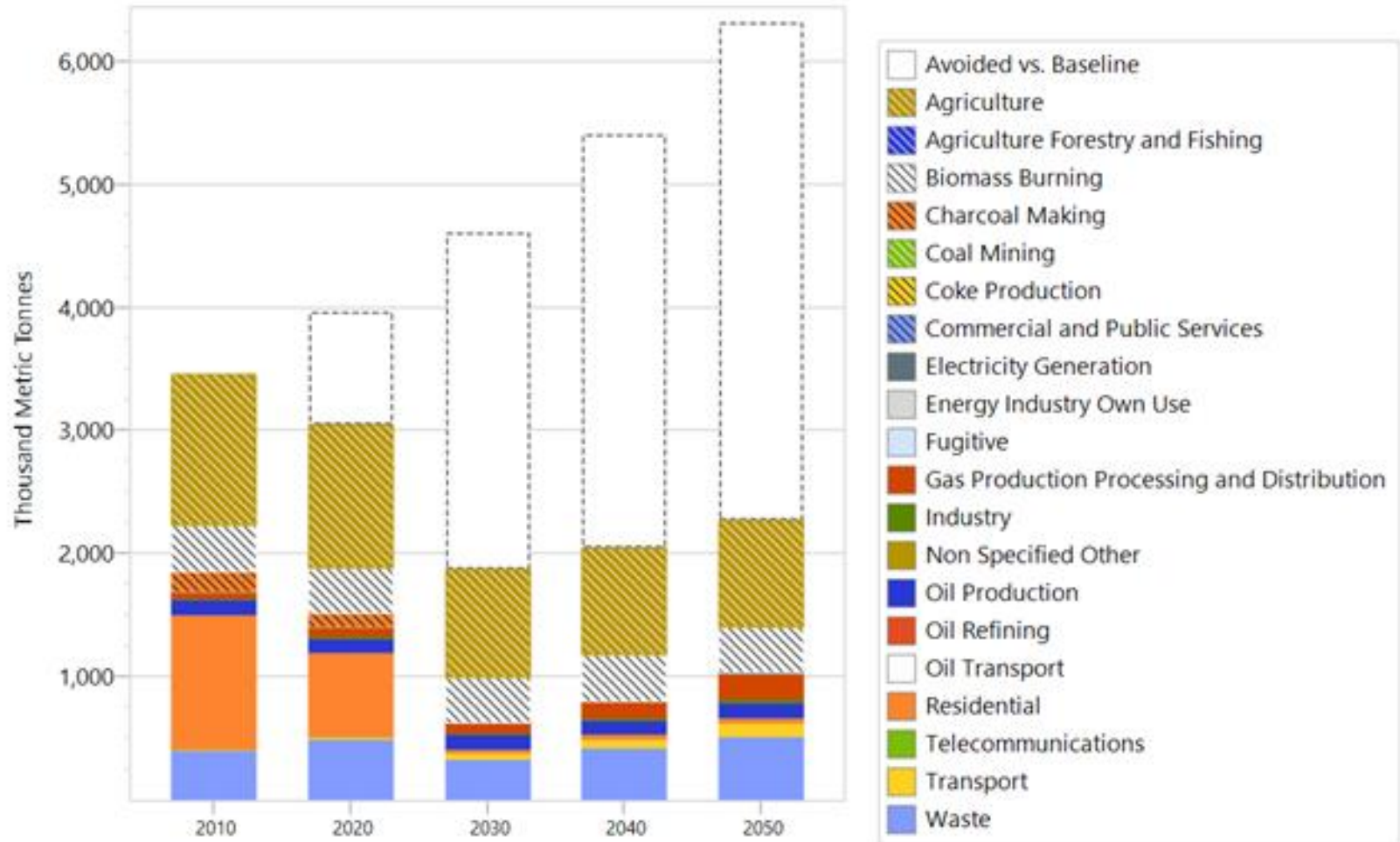


Fig 3.2: Methane Emission Savings

NIGERIA



Multiple benefits: GHG emission reduction from SLCP measures

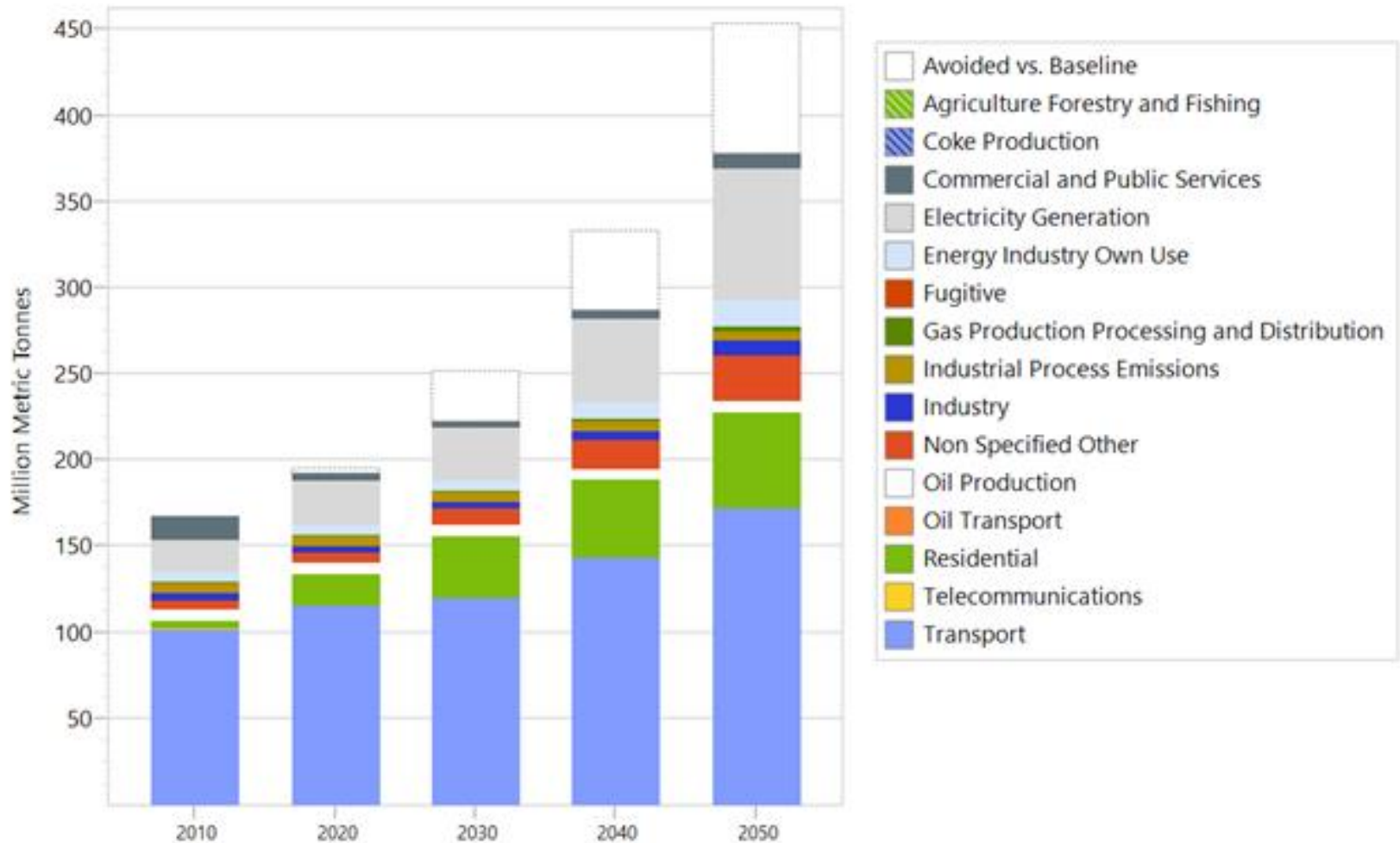


Fig.3.6: Carbon Dioxide Emission Savings



Multiple benefits: air pollutant emission reduction from SLCP measures

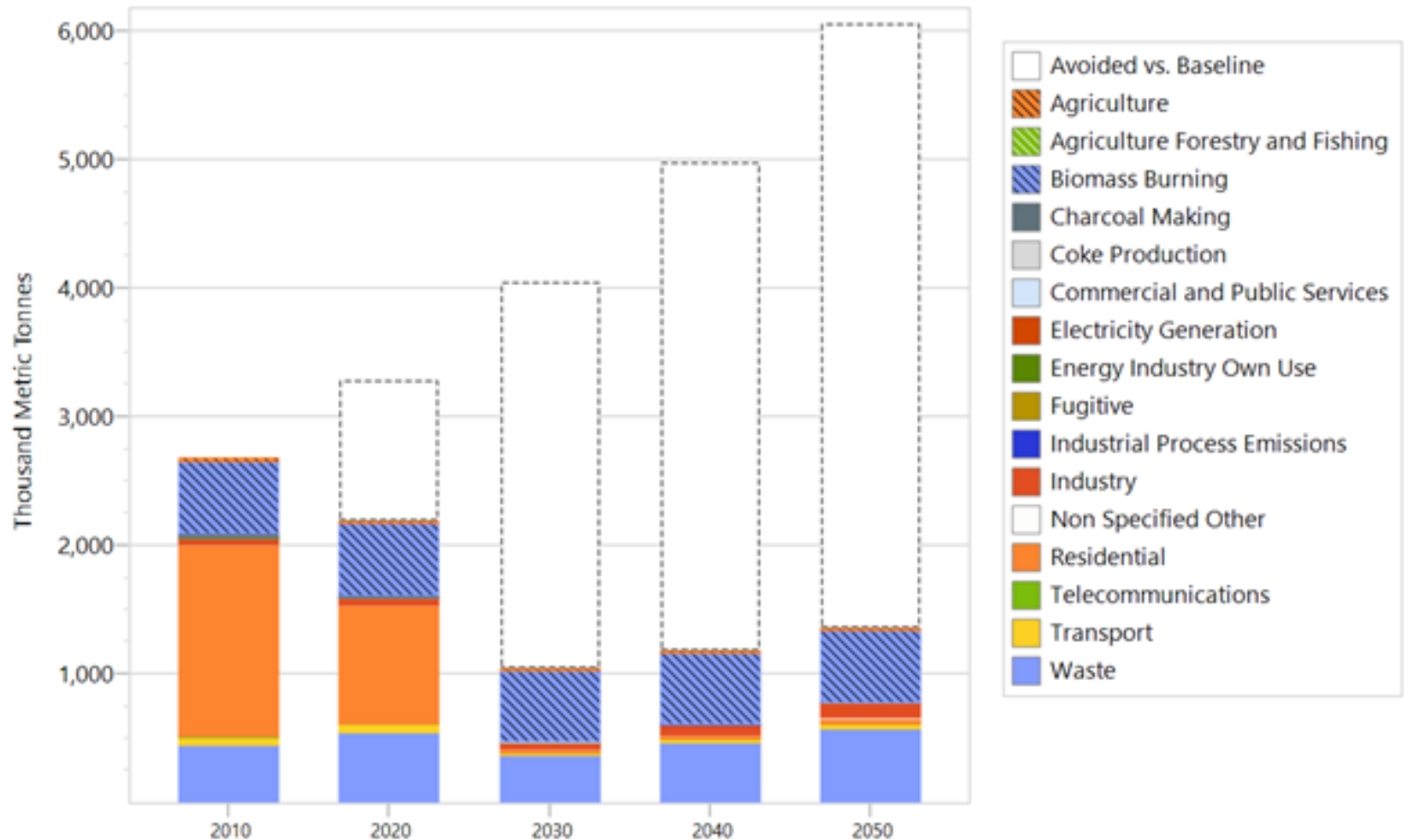
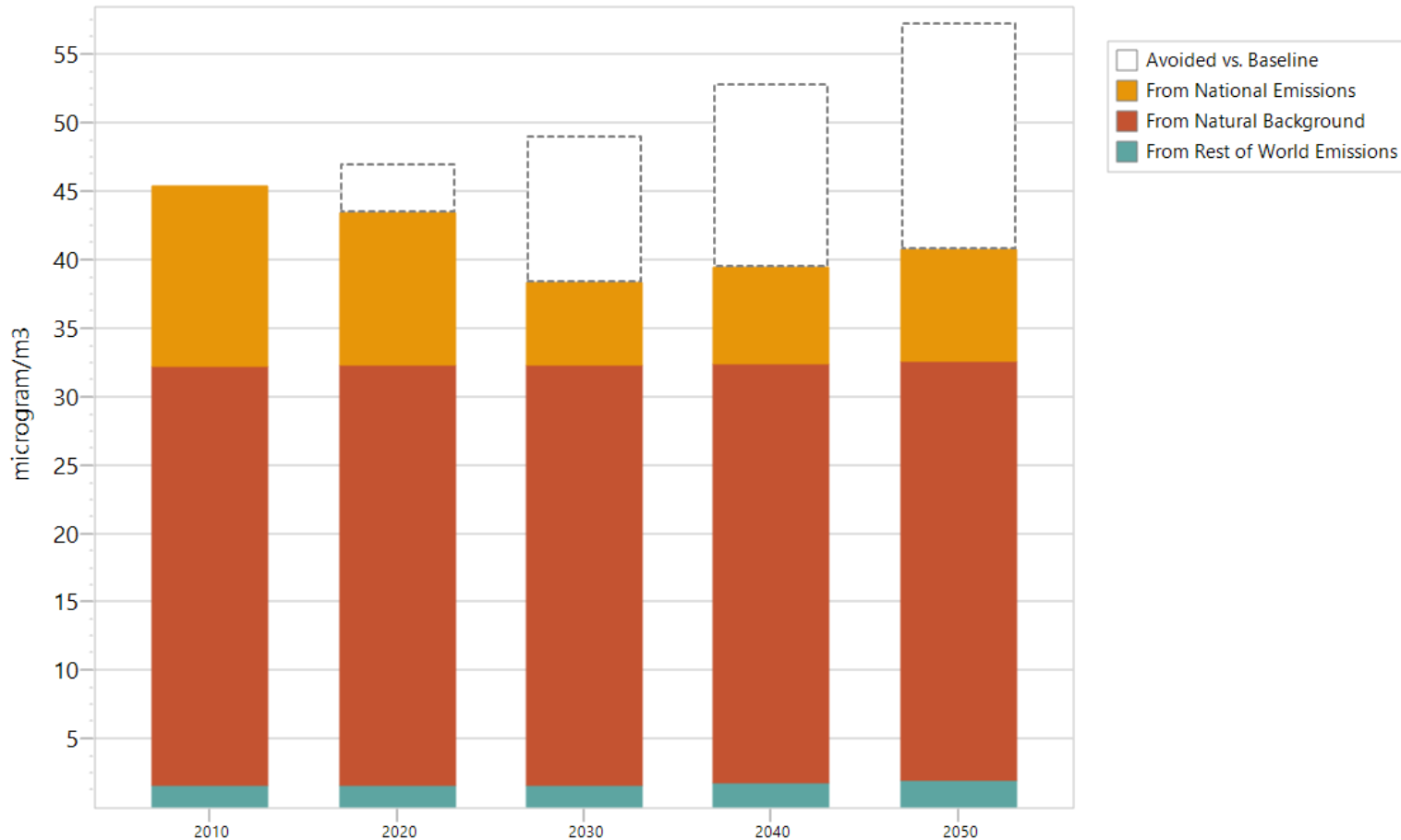


Fig. 3.3: PM_{2.5} Emission Savings





Air Quality benefits from SLCP Plan



PM_{2.5} concentration reductions from National SLCP Plan

- 4000 premature deaths avoided in 2030



Benefits from SLCP Plan

NIGERIA



	2030 baseline	2030 SLCP Plan
Black Carbon emissions	614 kt	-83%
Methane emissions	4614 kt	-62%
Carbon dioxide emissions	251 Mt	-13%
Population-weighted PM _{2.5} concentration	49 $\mu\text{g m}^{-3}$	-22%
Pop-weighted PM _{2.5} from national emissions	17 $\mu\text{g m}^{-3}$	-64%
PM _{2.5} attributable premature deaths	48,000 people	-14%
Global average temperature change due to Nigeria emissions	0.01879 °C (in 2050)	-80% (in 2050)





Linkage to other planning processes: SLCP Mitigation measures identified in Nigeria's NDC

1. Energy

- Renewable energy, particularly decentralised
- Multi-cycle power stations
- Scalable power stations of 20-50MW
- Enforced energy efficiency
- Use of natural gas rather than liquid fuels

2. Oil & Gas

Improved enforcement of gas flaring restrictions

3. Agriculture and Land Use

- Climate Smart Agriculture
- Stop using charcoal

4. Industry

- Benchmarking against international best practice for industrial energy usage
- Adoption of green technology in industry

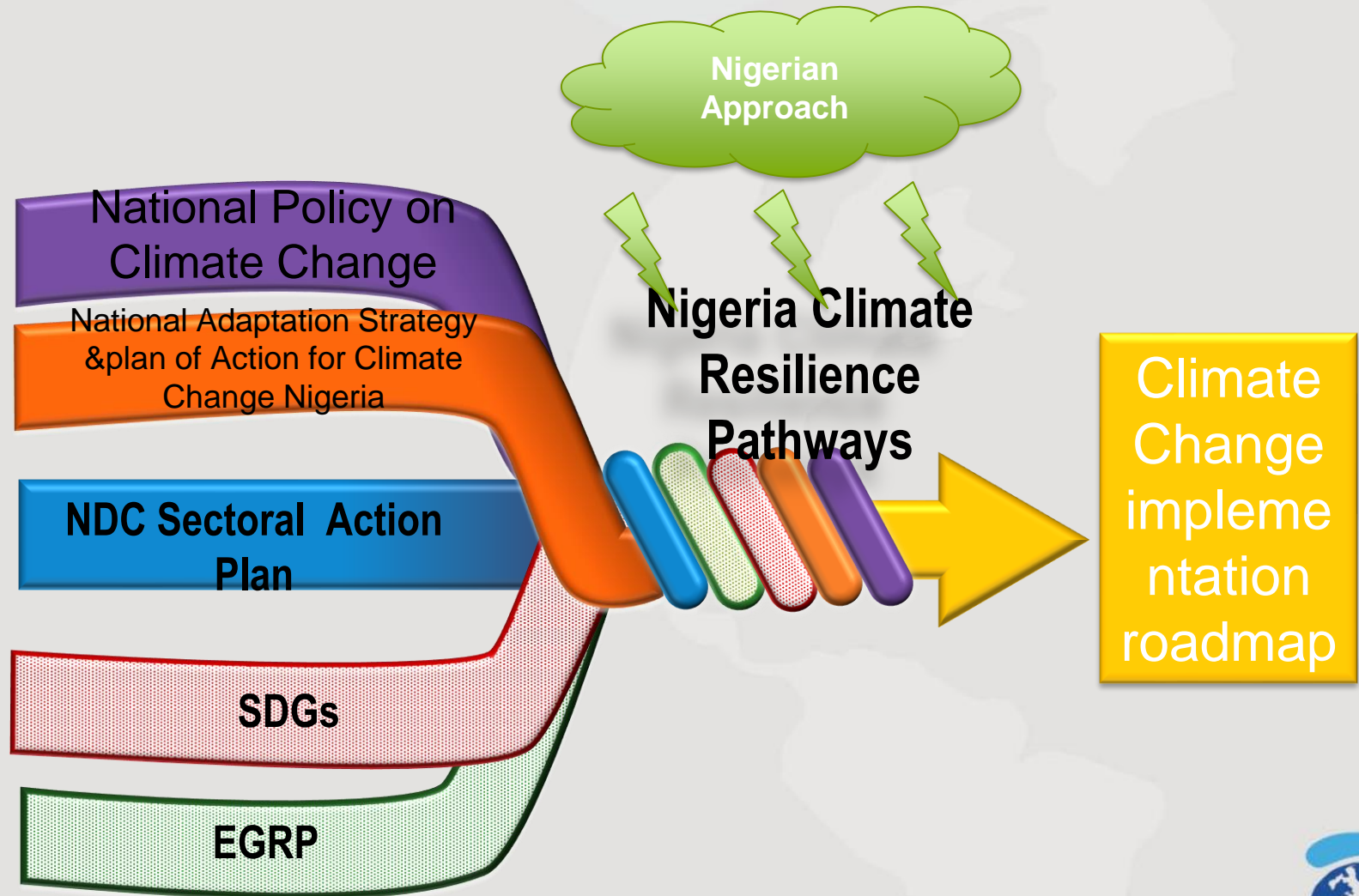
5. Transport

- Modal shift from air to high speed rail
- Moving freight to rail
- Upgrading roads
- Urban transit
- Toll roads/ road pricing
- Increasing use of CNG
- Reform petrol/ diesel subsidies





Nigeria Climate Resilience Pathways for Delivering Multiple Benefits for Clean Air and Climate



F. INTEGRATING CLIMATE ACTION, NDCs, SUSTAINABLE DEVELOPMENT AND CLEAN AIR

NIGERIA



Implementing Nigeria's National Action Plan to Reduce Short Lived Climate Pollutants will substantially address Nigeria's NDCs (BC & CH₄) as well as contribute to the attainment of the following Sustainable Development Goals (SDGs):

- Improved climate leads to increased agricultural productivity, Food Security, Jobs and Income which will address --- **SDG 1 & 2: No Poverty and Zero Hunger**
- Improved air quality, Food Security & nutrition --- **SDG 3: Good Health and Well being**
- Increased use of affordable clean energy saves women & children from exposure and death from indoor pollution leading to women empowerment--- **SDG 5 & 7: Affordable & Clean Energy and Gender Equality**
- Making available safe and clean water, reduced Municipal waste pollution and improved air quality guarantees good health and well being --- **SDG 6 & 11: Clean Water & Sanitation and Sustainable Cities & Communities (also SDG 3)**
- Achieving adaptation and mitigation to reduce effect of climate change and promote sustainable use of terrestrial ecosystems through global partnership--- **SDG 13, 15 & 17: Climate Action, Life on land and Global Partnership for Sustainable Development**





G. Next Steps To Implement The SLCP Plan After Its Adoption

- Presentation of the National Action Plan to the Federal Executive Council of Ministers by the Minister of Environment for endorsement
- Ministry of Budget and National Planning mainstreams the Action Plan into the National Planning process
- Legislative backing of NAP recommendations and ensuring Budgetary provision to MDAs for SLCP mitigation
- Coordination of activities of the established Desk Offices in MDAs responsible for implementation of SLCP issues and sustainability
- Sustainable Implementation by MDAs, NGOs and Private sector.
- Monitoring, Reporting and Verification (MRV) coordinated by the Federal Ministry of Environment.





H. Moving to implementation of National SLCP Plan

- Ensuring Budgetary provision to MDAs for SLCP mitigation
- Active participation of Private Sector and NGOs
- Coordination of activities of the established Desk Offices in MDAs responsible for implementation of SLCP issues and sustainability
- Ensuring Monitoring, Reporting and Verification (MRV) by the Federal Ministry of Environment

Thank you

