

DOMESTIC POLICY DEVELOPMENTS RELATED TO EMISSIONS TRADING AND CLIMATE POLICY – SOUTH AFRICA

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CONTEXT

- **SA developing country with significant development challenges - poverty, unemployment and high vulnerability to climate impacts**
- **Climate and development**
- **Adaptation and mitigation balance**
 - Majority of national “Climate” investment required for immediate adaptation priorities related to the poor
 - Close price gap on mitigation

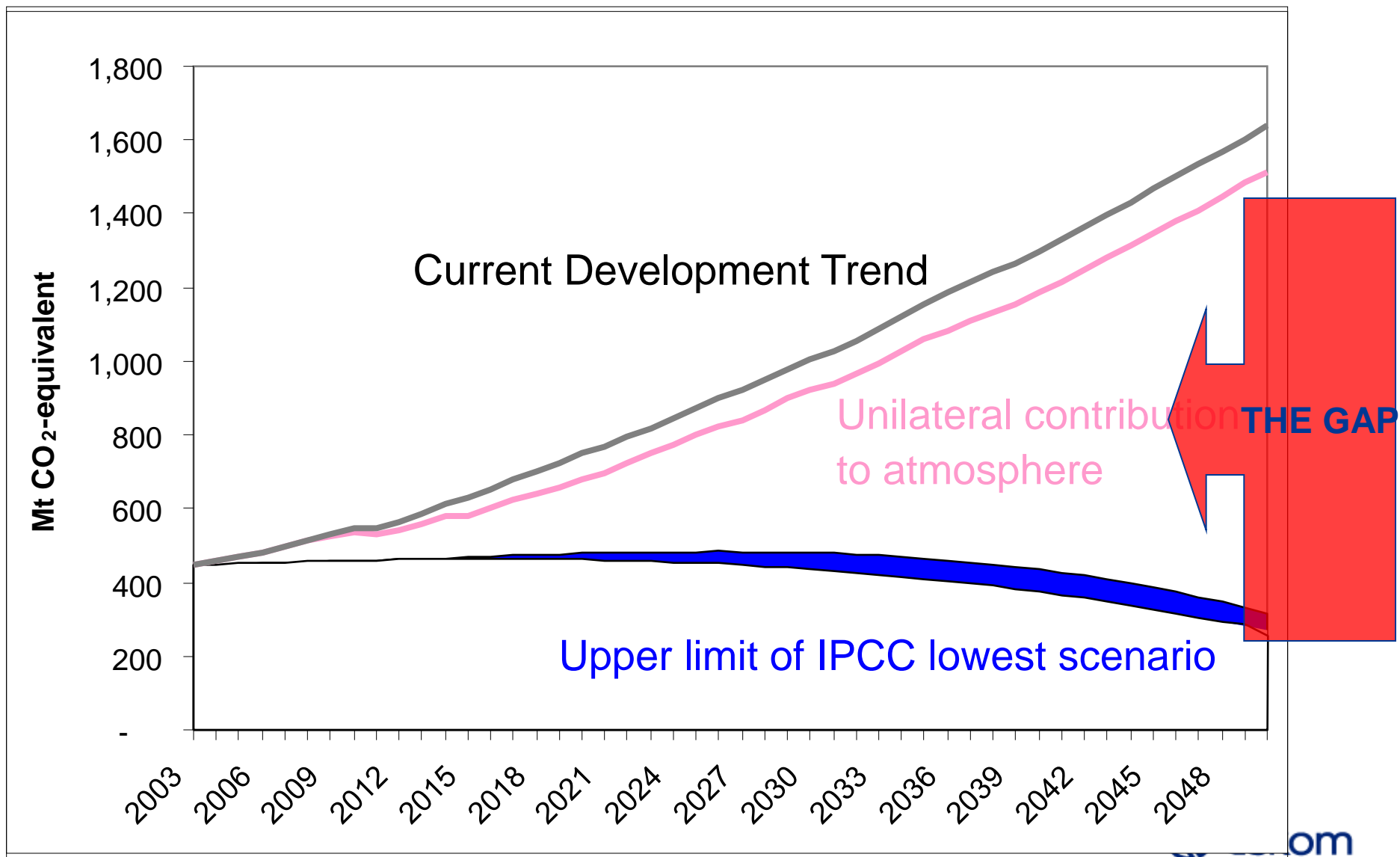
SOUTH AFRICA'S APPROACH TO MITIGATION

- **Recognition that SA must play its part in line with prescripts in Convention**
- **Take action in way appropriate to national circumstances**
- **Energy intensive economy – coal based**
- **Long Term Mitigation Scenarios (LTMS) study was done to identify various country mitigation potential scenarios in order to inform policy and action**

LTMS PROCESS

- **LTMS was a multi stakeholder, research based scenario process that produced an assessment of country's mitigation potential**
- **Rigorous, peer reviewed**
- **Inclusive**
- **Broad ownership**

TWO SCENARIOS FRAME SOUTH AFRICA'S OPTIONS



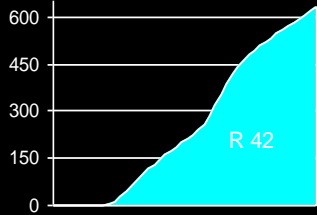
SA STRATEGIC ANALYSIS

- Energy modelling
 - **Markal model, least-cost optimising tool widely used for Integrated Energy Planning**
 - **Internationally peer-reviewed**
- Non-energy modelling
 - **Modelling, based on method developed for SA Country Study, based on international literature**
- Economy-wide impacts
 - **Computable General Equilibrium model, comparative static and dynamic approaches**
- Adaptation & Impacts
 - **Updating of state-of-the-art knowledge**

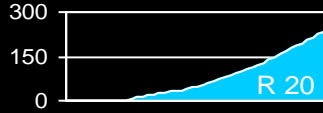
TECHNICAL OPTIONS

- **Used SD PAM's approach**
- **Calculated as “wedges”**
- **Mitigation actions with quantification of emission reductions & costs**
- **Scenarios and underlying research reports available**
 - <http://www.erc.uct.ac.za/Research/LTMS/LTMS-intro.htm>

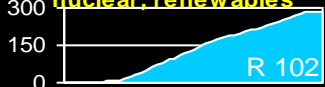
Escalating CO2 tax



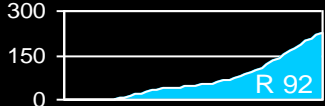
Nuclear, extended



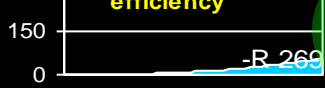
Electric vehicles with nuclear, renewables



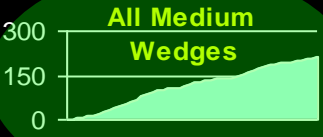
Renewables, extended



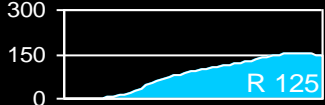
Improved vehicle efficiency



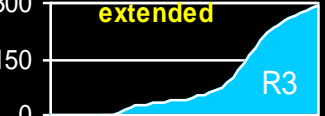
All Medium Wedges



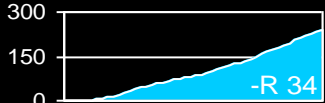
Subsidy for renewables



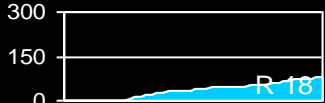
Renewables with learning, extended



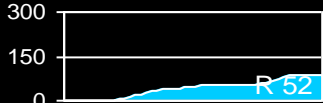
Industrial efficiency



Nuclear



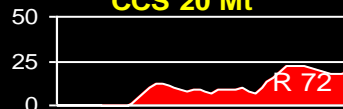
Renewables



SWH subsidy



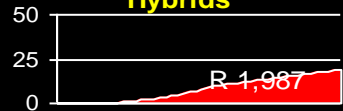
CCS 20 Mt



Biofuel subsidy



Hybrids



Residential efficiency



Cleaner coal



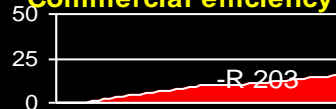
Fire control



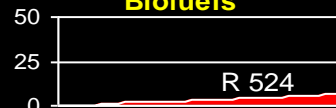
Electric vehicles in GWC grid



Commercial efficiency



Biofuels



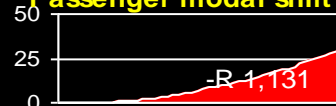
All Small Wedges



Waste management



Passenger modal shift



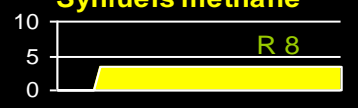
Synfuels CCS 23 Mt



Limit less eff vehicles



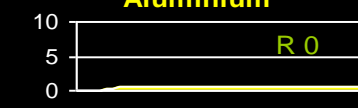
Synfuels methane



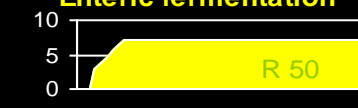
Manure management



Aluminium



Enteric fermentation



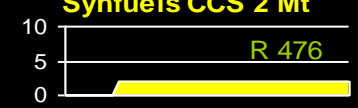
Reduced tillage



Afforestation



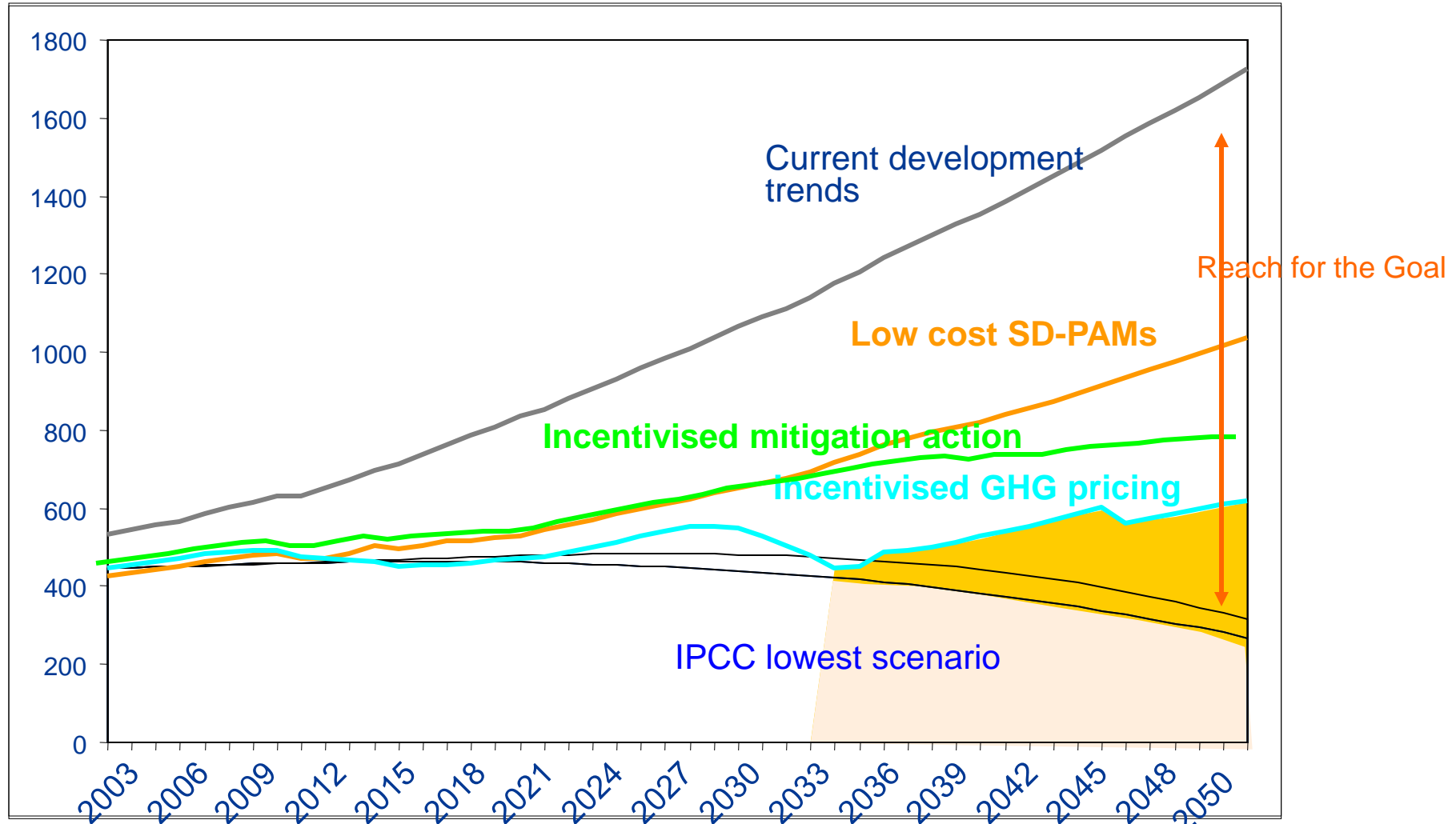
Synfuels CCS 2 Mt



Coal mine methane



FOUR STRATEGIC OPTIONS



LTMS Conclusions and further work

PROPOSED POLICY DIRECTIONS

- LTMS considered by SA Cabinet and 6 broad areas for further work identified
 - Greenhouse gas emission reductions and limits
 - Build on, strengthen and/or scale up current initiatives
 - Implementing the “Business Unusual” Call for Action
 - Preparing for the future
 - Prioritising Vulnerability and Adaptation
 - Integrating and Institutionalising Climate Change work

GHG EMISSION REDUCTIONS AND LIMITS

- **It is proposed that climate change mitigation interventions should be informed by, and monitored and measured against the following “peak, plateau and decline” emission trajectory**
 - Greenhouse gas emissions stop growing (start of plateau)
 - Greenhouse gas emissions begin declining in absolute terms (end of plateau)
 - Long-term greenhouse gas emission level reduces to levels required by science

BUILD ON, STRENGTHEN AND/OR SCALE UP CURRENT INITIATIVES

- **Current energy efficiency and electricity demand-side management initiatives and interventions must be scaled-up and reinforced, including setting national targets in line with LTMS**
- **Study to be undertaken on impact of a carbon tax on the South African economy and also look at a range of economic and fiscal mechanisms.**

IMPLEMENTING THE “BUSINESS UNUSUAL” CALL FOR ACTION

- Renewable energy sector is key “business unusual” growth sector and set more ambitious national target for renewable energy
- Transport sector is a key “business unusual” growth sector and plan developed to reduce its emissions.
- Government to promote the transition to a low-carbon economy and society and all policy and other decisions that may have an impact on South Africa’s GHG emissions.

PREPARING FOR THE FUTURE

- Increased support for research and development in the field of carbon-friendly technologies – with the focus on the renewable energy and transport sectors.
- Formal and informal forms of education and outreach are used to encourage the behavioural changes required to support the implementation of the climate change response policy.

VULNERABILITY AND ADAPTATION

- **Ongoing identification of vulnerabilities to climate change across all sectors and spheres of government.**
- **Integrate adaptation actions into all government plans as a key performance area**
- **Develop and implement climate adaptation plans with full stakeholder participation**

INTEGRATING AND INSTITUTIONALISING CLIMATE CHANGE WORK

- Clarify roles and Responsibilities across society
- Climate change response policies and measures are mainstreamed within existing alignment, coordination and cooperation structures inside and outside of Government

PROCESS GOING FORWARD: 2009 TO 2012

- National Climate Change Response Policy Development Summit
- Sectoral policy development work
- UNFCCC post-2012 negotiations concluded
- National policy updated for implementation of international commitments
- Green Paper published for public comment
- Final National Climate Change Response Policy published
- Policy translated into legislative, regulatory and fiscal package