Common Methodological Framework

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The checklist consists of four components:

1. **Country context**: Sectoral patterns of emissions, the socio-economic significance of these patterns and their drivers to help communicate country context internationally.

2. **Baseline pathways**: Plausible pathways for activity and associated emissions in the status quo.

3. **Alternative emissions pathways**: Identification of emission mitigation options and/or policies and their costs and benefits to develop emission mitigation pathways.

4. **Results presentation**: Suggestions on what and how to present results.
context in which future emissions can be analyzed

• might contain
  – emissions from sectors over time
  – socio-economic significance of sectors
  – drivers of emissions;

• largely drawn from existing national and international sources
  – emissions: national GHG inventories and sources such as IEA or EDGAR
    • Possibly augmented by new estimates
  – socio-economic: national accounts and sources such as World Bank

• typically descriptive statistics and accompanying narrative
  – can be augmented by decomposition analyses

• data quality can be assessed by reference to principles of
  – completeness
  – comparability
  – consistency
  – accuracy
Component 2 generates a baseline pathway for emissions

- broadly speaking, there are 4 different approaches that can be used to generate baseline pathway(s)
  - vary according to sophistication/accuracy but also costs and resources
  - different approaches could be used in different sectors

1. Trend extrapolation
2. Augmented trend extrapolation
3. Decomposition projection
4. Detailed bottom up analysis (see next slide)

- in each approach, value in being transparent about which existing and planned policies have been taken into account
- also important to take account of uncertainty by generating a range of pathways and scrutinizing carefully
deriving a baseline pathway consists of four elements

- **National economic forecasts**
  - National economic projections, drawing on evidence from other national planning exercises as well as international estimates
  - Consistent with global economic projections

- **Sectoral, sub-sectoral and activity forecasts**
  - Derivation of internally consistent sector, sub-sector and activity-level projections of emissions-generating activity
  - Consistent with global economic projections and including existing policies

- **Trends in emission factors**
  - Forward-looking assessment of emissions factors for each activity level, taking into account historical trends in improvement, expected future changes in technologies as well as existing and planned policy influence

- **Emissions**
  - Multiplication of emission factors and activity-level projections to derive activity-level emissions. Sum to generate sub-sector, sector and economy-wide emissions
The checklist suggests three ways to create alternative emissions pathways:

1. Technical analysis of emission reduction opportunities
2. Analysis of policy options
3. Combination of the two

For each approach (subcomponent) it provides information on the tools and analytical approaches available, strengths and weaknesses, and possible sources of data.

Regardless of approach taken, there can be merit in developing a range of different pathways to account for uncertainty and understand possible impacts of greater levels of ambition.
Deriving alternative pathways through technical and policy analysis is the most robust emission reduction opportunity analysis. Policy assessment will check that policies deliver expected emission reduction opportunities in an acceptable manner. Revise either policies or targeted emission reductions accordingly.
3. Information that could be presented

High-level summary of key results including
- timeframe
- type of pathway
- scope (if emissions)
- expected trajectory
- key assumptions

Presentation of more detailed assumptions e.g.
- costs
- speed
- expected impact of economic growth

Expected impacts and possible barriers
- both positive and negative

Can enhance credibility and identify where and how Intl community can support.

Can facilitate tracking and monitoring.