

**Partnership for Market Readiness (PMR) Technical Workshop
Post-2020 Mitigation Scenarios and Carbon Pricing Modelling**

Exercise: Building Policy Packages

INDUSTRY SECTOR HANDOUT

1) Review the below industry policy case study:

INDUSTRY POLICY CASE STUDY: INDIA

Background for policy:

At the time of independence, India had an underdeveloped and unbalanced industrial structure. Industries contributed less than one sixth part of national income. The country did have some industries like cotton textiles, jute and sugar, but there were very few basic, heavy and manufacturing industries on which programmes of future industrialisation could be based. Major industries were concentrated in a few cities only, with nearly no industrial development outside of those specific cities.

Overall policy objective:

- To undertake effective measures to increase the tempo of industrialisation
- To correct regional imbalances in industrial development
- To rectify the distorted industrial structure through rapid development of manufacturing industries

Specific policy objectives:

- *Rapid Industrial Development:*

The industrial policy of the Government of India is aimed at increasing the tempo of industrial development. It seeks to create a favourable investment climate for the private sector as well as mobilise resources for the investment in public sector. In its way the government seeks to promote rapid industrial development in the country.

- *Balanced industrial Structure:*

The industrial policy is designed to correct the prevailing lopsided industrial structure. Thus, for example, before independence, India had some fairly developed consumer goods industries. But the capital goods sector was not developed at all and basic and heavy industries were by and large absent.

So the industrial policy had to be framed in such a manner that these imbalances in the industrial structure are corrected. Thus by laying emphasis on heavy industries and development of capital goods sector, industrial policy seeks to bring a balance in industrial structure.

- *Prevention of Concentration of Economic Power:*

The industrial policy seeks to provide a framework of rules, regulations and reservation of spheres of activity for the public and the private sectors. This is aimed at reducing the monopolistic tendencies and preventing concentration of economic power in the hands of a few big industrial houses.

- *Balanced Regional Growth:*

Industrial policy also aims at correcting regional imbalances in industrial development. It is quite well-known that some regions in the country are industrially quite advanced e.g., Maharashtra and Gujarat while others are industrially backward, like Bihar, Orissa. It is the task of industrial policy to work out programmes and policies which lead to industrial development or industrial growth.

The Industrial policy of 1948, which was the first industrial policy statement of the Government of India, was changed in 1956 in a public sector dominated industrial development policy that remained in force till 1991 with some minor modifications and amendments in 1977 and 1980. In 1991, far reaching changes were made in the 1956 industrial policy. The new Industrial Policy of July 1991 heralded the framework for industrial development at present.

- 2) Within your group, identify potential interactions between the industry policy with a potential carbon pricing policy. Consider both synergies as well as potential tensions. Some thought prompts are provided below.

THOUGHT PROMPTERS: identifying potential policy interactions

- Does the industry policy *encourage* or *discourage* the availability or use of low-carbon fuels? Is the industry policy likely to otherwise *increase* or *decrease* the carbon intensity of the sector?
- Is the industry policy likely to *increase* or *decrease* overall activity levels (and emissions) in the sector?
- Is the industry policy likely to *encourage* or *hinder* the introduction of newer, more efficient technologies?
- Is the industry policy likely to *encourage* or *hinder* investment in efficient technologies? Consider the availability of knowledge and capacity domestically, the local technology supply chain, the regulatory environment and investor confidence, is knowledge or technology transfer from potentially more efficient industries internationally supported?
- Would the introduction of a carbon pricing policy be likely to impact *positively* or *negatively* on industry achieving its objectives as set out in the industry policy? (e.g. growth, competitiveness, etc)
- Would the introduction of a carbon pricing policy have any cost impacts on the industry sector? (e.g. compliance costs, pass-through costs, impacts on the price of electricity, transport fuels, gas or other fuels).

- 3) Within your group, discuss how the modelling of carbon pricing policies should take into account the potential interactions with industry policy identified in step 2). For example:
- Baseline emissions and available emission abatement measures
 - Emissions growth and fuel mix over the short, medium and long term
 - Uptake of low carbon measures over the short, medium and long term
 - Use of offsets

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TRANSPORT SECTOR HANDOUT

1) Review the below transport policy case study:

TRANSPORT POLICY CASE STUDY: ROADMAP TO A SINGLE EUROPEAN TRANSPORT AREA – TOWARDS A COMPETITIVE AND RESOURCE EFFICIENT TRANSPORT SYSTEM (WHITE PAPER 2011)

Background for policy:

The European Commission adopted a roadmap of 40 concrete initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment.

Overall policy objective:

Dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050.

Specific policy objectives:

- No more conventionally-fuelled cars in cities.
- 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions.
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport.
- All of which will contribute to a 60% cut in transport emissions by the middle of the century.

Type of instruments/activities that policy includes:

- Invest in EU research to address the full cycle of research, innovation and deployment and in technological innovation
- Devise an innovation and deployment strategy for the transport sector, in close cooperation with the strategic energy technology plan (SET-plan), identifying appropriate governance and financing instruments, in order to ensure a rapid deployment of research results
- Deploy smart mobility systems developed through EU-funded research
- Develop new financing instruments, for example the EU project bonds initiative, that can support private–public partnerships (PPPs) financing on a bigger scale
- Transport charges and taxes must be restructured in the direction of wider application of the ‘polluter pays’ and ‘user pays’ principles
- Examine proposals to achieve greater consistency between the various elements of transport taxation and to encourage the rapid introduction of clean vehicles.
- Internalisation of externalities, elimination of tax distortions and unjustified subsidies and free and undistorted competition are part of the effort to align market choices with sustainability needs (and to reflect the economic costs of ‘non-sustainability’).
- Extend internal market rules through work in international organisations (ICAO, IMO, OTIF, OSJD, UNECE, the international river commissions, etc.)
- Extend transport and infrastructure policy to immediate neighbours, including in the preparation of mobility continuity plans, to deliver closer market integration
- Promote approach globally: opening up transport markets to free and undistorted competition and environmentally sustainable solutions.

- 2) Within your group, identify potential interactions between the transport policy with a potential carbon pricing policy. Consider both synergies as well as potential tensions. Some thought prompts are provided below.

THOUGHT PROMPTERS: identifying potential policy interactions

- Does the transport policy *encourage* or *discourage* the availability or use of low-carbon fuels? Is the transport policy likely to otherwise *increase* or *decrease* the carbon intensity of the sector (e.g. methane emissions)?
- Is the transport policy likely to *increase* or *decrease* overall activity levels (and emissions) in the sector?
- Is the transport policy likely to *encourage* or *hinder* the introduction of newer, more efficient technologies?
- Is the transport policy likely to *encourage* or *hinder* investment in efficient technologies? Consider the availability of knowledge and capacity domestically, the local technology supply chain, the regulatory environment and investor confidence, is knowledge or technology transfer from potentially more efficient industries internationally supported?
- Would the introduction of a carbon pricing policy be likely to impact *positively* or *negatively* on the transport sector achieving its objectives as set out in the transport policy? (e.g. growth, competitiveness, etc)
- Would the introduction of a carbon pricing policy have any cost impacts on the transport sector? (e.g. compliance costs, pass-through costs, impacts on the price of electricity, transport fuels, gas or other fuels).

- 3) Within your group, discuss how the modelling of carbon pricing policies should take into account the potential interactions with transport policy identified in step 2). For example:

- Baseline emissions and available emission abatement measures
- Emissions growth and fuel mix over the short, medium and long term
- Uptake of low carbon measures over the short, medium and long term
- Use of offsets

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AGRICULTURE SECTOR HANDOUT

1) Review the below agriculture policy case study:

AGRICULTURE SECTOR POLICY CASE STUDY: KENYA

Background for policy:

Agriculture is the backbone of the Kenyan economy. It contributes approximately 25% of GDP, employing 75% of the national labour force. Over 80% of the Kenyan population live in rural areas and make a living, directly or indirectly, from agriculture. Given its importance, the performance of the sector is therefore reflected in the performance of the whole economy. The development of agriculture is also important for poverty reduction since most of the vulnerable groups like pastoralists, the landless, and subsistence farmers, also depend on agriculture as their main source of livelihoods. Growth in the sector is therefore expected to have a greater impact on a larger section of the population than any other sector. The development of the sector is therefore important for the development of the economy as a whole.

Objectives of policy:

- Increasing agricultural productivity and incomes, especially for small-holder farmers
- Emphasis on irrigation to reduce over-reliance on rain-fed agriculture in the face of limited high potential agricultural land
- Encouraging diversification into non-traditional agricultural commodities and value addition to reduce vulnerability.
- Enhancing the food security and a reduction in the number of those suffering from hunger and hence the achievement of MDGs.
- Encouraging private-sector-led development of the sector.
- Ensuring environmental sustainability.

Type of instruments/activities that policy could include:

- Launch of Strategy for Revitalising Agriculture which a ten-year program to guide agricultural sector
- Development of a legal and regulatory framework that is fair to all farmers, producers, processors and marketers of agri-products
- Create "ownership" of strategy to make the policy more participatory
- Develop Monitoring and Evaluation systems to track efficiency of strategy

- 2) Within your group, identify potential interactions between the agriculture policy with a potential carbon pricing policy. Consider both synergies as well as potential tensions. Some thought prompts are provided below.

THOUGHT PROMPTERS: identifying potential policy interactions

- Does the agriculture policy *encourage* or *discourage* the availability or use of low-carbon fuels? Is the agriculture policy likely to otherwise *increase* or *decrease* the carbon intensity of the sector (e.g. methane emissions, deforestation, reforestation)?
- Is the agriculture policy likely to *increase* or *decrease* overall activity levels (and emissions) in the sector?
- Is the agriculture policy likely to *encourage* or *hinder* the introduction of newer, more efficient technologies?
- Is the agriculture policy likely to *encourage* or *hinder* investment in efficient technologies? Consider the availability of knowledge and capacity domestically, the local technology supply chain, the regulatory environment and investor confidence, is knowledge or technology transfer from potentially more efficient industries internationally supported?
- Would the introduction of a carbon pricing policy be likely to impact *positively* or *negatively* on agriculture achieving its objectives as set out in the agriculture policy? (e.g. growth, competitiveness, etc)
- Would the introduction of a carbon pricing policy have any cost impacts on the agriculture sector? (e.g. compliance costs, pass-through costs, impacts on the price of electricity, transport fuels, gas or other fuels).
- Is the agriculture sector likely to be a potential source of carbon offsets for the carbon pricing policy?

- 3) Within your group, discuss how the modelling of carbon pricing policies should take into account the potential interactions with agriculture policy identified in step 2). For example:
- Baseline emissions and available emission abatement measures
 - Emissions growth and fuel mix over the short, medium and long term
 - Uptake of low carbon measures over the short, medium and long term
 - Use of offsets