

Introduction to SEA and EIA in industrial sector

ECRAN Regional training workshop
Skopje, September 21 – 22, 2016



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SEA in industrial sector



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SEA in industrial sector

- SEA Directive, Art. 3.2 *'...environmental assessment shall be carried out for all plans and programmes, (a) which are prepared for agriculture, forestry, fisheries, **energy**, **industry**, transport, waste management, water management, telecommunications, tourism, town and **country planning or land use...**'*



Planning and programming for industrial sector

- Typically countries do not have 'industrial policies', but industry is addressed by general economic development strategic documents
 - Economic development strategic and plans
 - Operational programmes
 - Sectoral documents (mining industry, energy industry)



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Examples of SEA application in industrial sector

- Programming (policy) level
 - SEAs for Operational Programmes (ERDF OP England, OP Enterprise and Innovations, Czech Republic)
 - SEA of Northern Periphery Programme (Interreg) covering regions in Finland, Ireland, Northern Ireland, Sweden, Scotland, Greenland, Iceland, Norway and the Faeroe Islands – promotes innovations and competitiveness
 - SEA for energy policies / raw material policies



Examples of SEA application in industrial sector

- Planning level
 - SEA of Eco-Industrial Parks (Raibano, Italy)
 - SEAs for spatial/land-use plans: locations for industrial zones
- Out-of-EU examples
 - SEA of Industrial Development Scenarios, Iran
 - SEA for Industry Sector Himachal Pradesh, India
 - SEA for National Economic Master Plan, Indonesia



Key issues addressed

- SEA of OP Enterprise and Innovation, Czech Republic
 - OP's objectives
 - To intensify the activity of SMEs
 - To increase the competitiveness of enterprises by **implementing new technologies and innovative activities**
 - to **increase the effectiveness of the use of energy in the industry** and the use of renewable and possibly secondary energy sources
 - To encourage cooperation between the **industry sector and R&D**
 - To increase effectiveness of human potential use in industry
 - To increase quality of entrepreneurial infrastructure



Key issues addressed

- SEA of OP Enterprise and Innovation, Czech Republic
 - SEA objectives
 - Reduce GHG emissions
 - Reduce emissions of SO₂, NO_x, VOC
 - Reduce water pollution
 - Reduce occupation of new land
 - Secure protection and renewal of migration routes and corridors
 - Increase energy production from renewable resources
 - Further increase energy efficiency
 - Reduce waste production and increase waste re-use and recycling



Key issues addressed

- SEA of Northern Periphery Programme – main focus on research&technology development, SMEs support
- Key issues for SEA
 - Climate Change – GHG emissions / adaptations
 - Tourism
 - Waste management
 - Marine Pollution

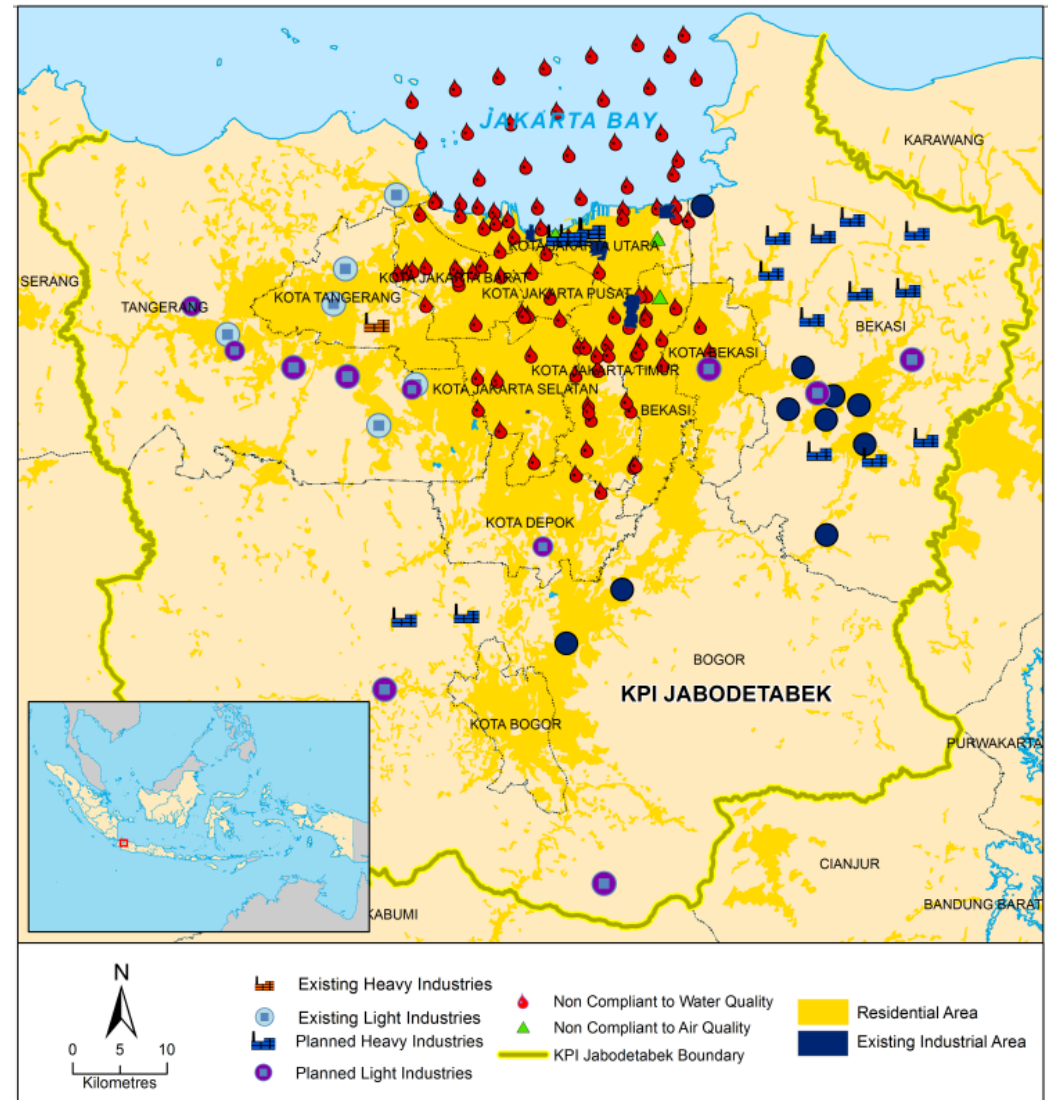
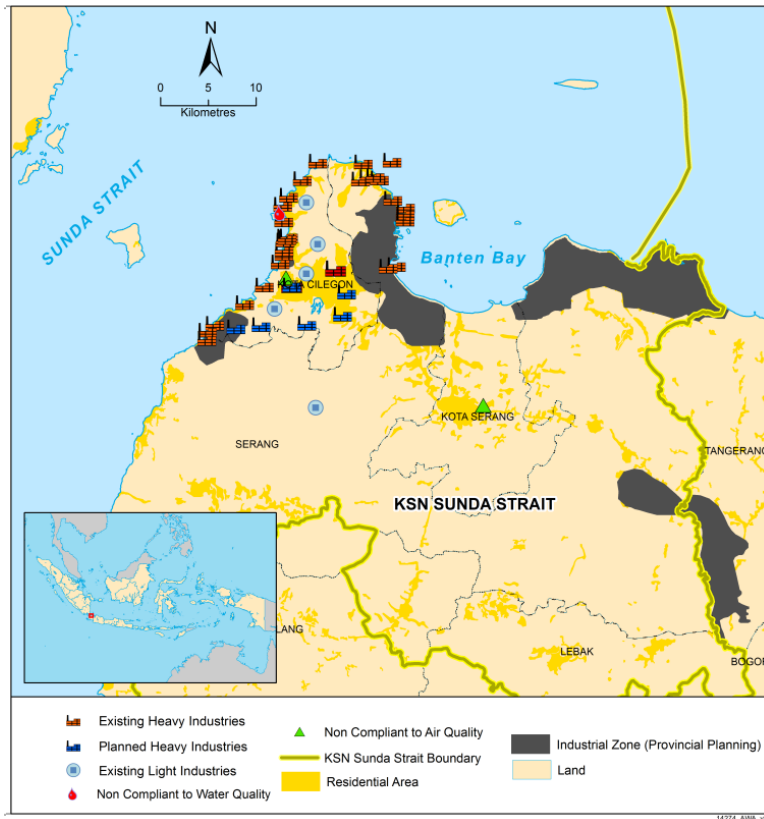


Specifics of SEA in industrial sector

- Programming (policy) level typically very general i.e. no specification of
 - Types of industry supported
 - Locations
 - Scope of development (can be estimated based on financial allocation)
- Same applies to planning level...but locations are known



Examples of analyses – scoping



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Examples of analyses – quantification of likely impacts

- DSS/IPC modelling (Greater Jakarta area)

Polutant	DSS/IPC model (kilotonnes)	Data from UK for 2012 (kilotonnes)
VOC	129.1	104.8
NOx	79.9	1061.6
PM10	25.7	112.8
PM2.5	15.8	77.2
SOx	41.7	87.3



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EIA in industrial sector



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Industrial projects subject to EIA

- Industrial projects specified in the Annex I of the EIA Directive (2011/92/EU) as amended (2014/52/EU), i.e. project always, which shall always be subject to an assessment
- Industrial projects specified in the Annex II of the EIA Directive, i.e. projects subject to determination whether the project shall be subject to an assessment
- Variability of projects (e.g. country specifics)
- Number of projects



Industrial projects specified in the Annex I

- Projects in industrial sectors with expected large environmental impact(s) or expected significant impact(s) on public health, for example: (selection only, simplified)
 - Crude-oil refineries
 - Thermal power stations
 - Nuclear power stations
 - Installations for the reprocessing of irradiated nuclear fuel
 - Integrated works for smelting of cast iron and steel
 - Installations for extraction and/or processing of asbestos
 - Integrated chemical installations
 - Installations for production of pulp from timber
 - Quarries and open-cast mining, where the surface of the site exceeds 25 hectares



Industrial projects specified in the Annex II

- Projects in industrial sectors with potential significant environmental impacts or potential significant impacts on public health, e.g.:
 - Extractive industry
 - Energy industry
 - Production and processing of metals
 - Mineral industry
 - Food industry
 - Textile, leather wood and paper industries
 - Rubber industry

In some cases relevant only for projects not included in Annex I



Variability of projects

- Different industrial projects prevail in different countries depending on regional / country specifics (historical development, human resources, availability of raw materials, transport options, etc.)
- There are both complex and „simple“ industrial projects
- Industrial projects of the same sector can be very different
- Environmental impacts of industrial projects on individual environmental sectors can vary significantly.
- There is no simple united recipe how to deal with this type of projects.



Number of projects

- Really large industrial projects (new constructions) are not frequent
- Completely new constructions are not common, changes of existing industrial installations largely prevails
- Vast majority of projects subject to EIA in the Czech Republic are not industrial projects



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Major challenges in EIA related to industrial projects

- Missing data and/or information collection, especially in case of new construction
- Limited access to confidential data and/or information
- Demanding and/or time consuming analyses and surveys
- Sometimes lack of method for evaluation of certain impacts
- In some cases no or very limited practical experience with certain type of project
- There is no simple united recipe how to deal with EIA concerning industrial projects
- Resistance against any industrial project
- Public participation



Good reasons for Public Participation

- Part of overall strategy of the investor (Public Relations, Image Making).
- Improvement of communication, transparency, building of confidence
- Effort to avoid problems with public (elimination of conflicts, minimisation of NIMBY syndrome, satisfaction to part of opponents)
- Belief in better quality of scoping (integration of opinions of key local stakeholder, finding of potential problems, completion of proposals)

Key objectives of Public Participation

- Take account of views and concerns of key stakeholders.
- Ensure that important impacts are not overlooked
- Reduce conflicts through the early identification of contentious issues
- Improve transparency and increase public confidence in the EIA/permit process
- Obtain local input into the design of alternatives and mitigation measures stand



Principles for successful application of public participation techniques

- Provide the right information at the right time
- Allow sufficient time for review and response.
- Provide appropriate opportunities and means for stakeholder involvement.
- Select appropriate venues, and schedule events to suit stakeholders.

Common excuses given for avoiding public participation

- It's too early in the process
- It will take too long and cost too much
- It will stir up opposition
- The debate will be one-sided
- We will raise too many expectations
- People won't understand



EIA and IPPC

Role of EIA and IPPC in industrial pollution, prevention and control:

EIA Directive

- Assesses environmental impacts before the plant is built or significantly changed.

IPPC Directive

- Checks if BAT is used. Sets conditions for operation of the installation.



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Thank you for your attention!



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