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Environmental legislation affecting the financial sector

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Dr. Nikola Ružinski, State Secretary
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Main challenges:

- **Legislative**
  - One of the widest area of the acquis (more than 270 pieces of legislation, 80 major directives)

- **Institutional**
  - Strengthen administrative structures: ministries, agencies, implementation and enforcement institutions
  - Support to development of regional and local administrations
  - Strengthen interministerial coordination
  - Strengthen environmental management in business sector
  - Transposition of all legislation by the date of accession and setting in place administrative structures
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Main Challenges:

• First priority for full implementation:
  - framework legislation: air, water, waste, Environmental Impact Assessment, Access to Information, and nature protection legislation
  - international conventions, trans-boundary pollution reduction
  - industrial and single market related legislation

• Financial
  • High compliance costs- investments in infrastructure, structures and human resources
  All new investments should comply with *acquis*
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Investment challenges—key “Investment-Heavy Directives”

**Water supply / Wastewater Treatment**
- Water Framework Directive
- Urban Wastewater Treatment Directive
- Drinking Water Directive

**Air Pollution Control**
- Fuel Quality Directives
- Air Quality Directives

**Waste Management**
- Landfill Directive
- Incineration of Dangerous Waste Directive
- Incineration of Waste Directive
- Packaging and Packaging Waste Directive

**Industrial Pollution Control**
- Large Combustion Plants Directive
- Industrial Prevention Pollution Control /IPPC/ Directive

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Transposition of “Investment - Heavy Directives” into Croatian Legislation

- Environmental Protection Act (Official Gazette No. 82/94, 128/99)
  - New umbrella law – planned to be adopted in 2006
    - Environmental impact assessment
    - Integrated Prevention Pollution and Control (IPPC) Directive
    - Access to information
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Transposition of “Investment - Heavy Directives” into Croatian Legislation – Air quality

- Air Protection Act (Official Gazette No. 178/04)
- and 6 regulations:
  - Regulation on limit values and alert thresholds for SO$_2$, NO$_x$, CO, benzene, particulate matter and lead in ambient air (under preparation)
  - Regulation on ozone in ambient air (under preparation)
  - Regulation on liquid oil fuels quality (2006)
  - Regulation on emission limit values for combustion installations, internal combustion engines and for gas turbines (2006)
  - Regulation on emission limit values for processes of thermal treatment of waste (2006)
  - Regulation on emission limit values for installations using solvents (2006)
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Transposition of key “Investment-heavy Directives” into Croatian Legislation

- **Waste Act** (Official Gazette No. 178/04)

  Ordinances (*under preparation*):
  - Ordinance on Packaging and Packaging Waste
  - Ordinance on Landfills
  - Ordinance on Incineration
Transposition of key “Investment-heavy directives” into Croatian Legislation

- **Water Act** (Official Gazette No. 107/95)
  - Amendments to the Water Act (Autumn 2005) - alignment with Water Framework Directive (WFD)
    - **Ordinances:**
      - Ordinance on keeping water related documents (Autumn 2005)
      - Ordinance on limit values and indices of hazardous and other substances in wastewater (2006), and others

- **Water Management Financing Act** (Official Gazette No. 107/95, 19/96, 88/98) and implementing legislation
  /Amendments planned for 2006/

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## Investment-heavy directives implications – heavy and other investments

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>HEAVY INVESTMENTS</th>
<th>OTHER INVESTMENTS</th>
</tr>
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</table>
| Waste Management    | *Municipal waste*  
Waste management centers  
Waste thermal power plants  
Waste collection sites (recycling yards, green islands, etc.)  
Facilities for mechanical- biological treatment  
Lanfill reconstruction/remediation  
*Hazardous waste*  
Incinerators  
Landfill and old industrial sites remediation/closure  
*Other types of waste*  
Facilities, equipment, etc. | Waste collection /transport - equipment  
Water / groundwater/soil monitoring equipment  
Air quality monitoring equipment  
Laboratories for testing sewage sludge, etc. |
| Industrial Pollution Control | Processes  BAT technologies  
Pollution control systems  
Emission pollutants control systems  
Accident prevention measure | Air / water / groundwater /soil monitoring equipment |
## “Investment Heavy Directives“ implications – heavy and other investments

<table>
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<th>HEAVY INVESTMENT</th>
<th>OTHER INVESTMENT</th>
</tr>
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</table>
| Air quality     | Reduction of emission pollutants from stationary sources (combustion plants, industrial plants) and from mobile sources  
                  Improvement of liquid fuel oils quality-reconstruction of oil refineries, fitting to enable VOC collection during filling, VOC recovery units | Air quality monitoring  
                  Emission pollutants emission monitoring  
                  Testing systems (oil refineries)                                                                                                                 |
| Water quality   | Wastewater treatment plants  
                  Wastewater collection systems  
                  Water supply system  
                  Pre-treatment of industrial discharges to sewers  
                  *                                                                                                                                               | Surface and underground water monitoring  
                  Drinking water quality monitoring  
                  Effluent monitoring  
                  Ecological monitoring                                                   |
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Priority investments – waste sector

- Establishment of waste management centres (on county and regional level) and remediation of landfills
  - possible sources of financing: county and local budgets, Environmental Protection and Energy Efficiency Fund and pre-accession funds (EPEFF), Croatian development and commercial banks, International Financial Institutions (IFI)

- Remediation of landfills (that are not in compliance with regulations)
  - financed primarily through the Environmental Protection and Energy Efficiency Fund (started in 2004)

- Remediation and closure of highly polluted industrial sites
  /Activities on development of remediation programmes initiated by the MEEEPCC in 2004 /

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Environmental Law Approximation – Cost estimates

Documents dealing with cost estimates:


- Economic Memorandum for Croatia, World Bank July 2003 (estimates on the basis of three scenarios of reform (basic scenario, medium reform, high reform): capital costs from EUR 1,390 to EUR 2,680 per capita (50% water sector; 50% sectors of waste and air and IPPC Directive implementation (basic scenario, a 20-year period)

Potential investors

- **Waste management:**
  - regional and local self-goverment units, State, Fund for Environmental Protection and Energy Efficiency (FEPEF), public utility companies, public institutions (hospitals,..), bussines entities (industry, transport..)

- **Air quality:** oil refineries, combustion plants, petrol distribution stations, storage installations, State, regional and local self-goverment units,

- **IPPC Directive:** business entities (industry, agriculture, energy sector, ...); waste, sewage and wastewater utility companies, State ....

- **Water quality:**
  - watersupply, sewage and wastewater treatment utility companies, local self-goverment units, Croatian waters

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**Possible Sources of Finance for Infrastructure Investments**

<table>
<thead>
<tr>
<th>Public sources (budgetary and extra-budgetary funds)</th>
<th>Other sources:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• State Budget</td>
<td>• Concession agreements (especially with respect to public wastewater discharge and waste disposal systems); public/private partnership</td>
</tr>
<tr>
<td>• Environmental Protection and Energy Efficiency Fund</td>
<td>• EU pre-accession funds (ISPA, IPA), Cohesion and Structural funds</td>
</tr>
<tr>
<td>• Croatian Water Public Company</td>
<td>• domestic and foreign loans (Croatian Bank for Reconstruction and Development, IFI, commercial banks)</td>
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<tr>
<td>• Regional self-government units and the Town of Zagreb</td>
<td>• Own resources</td>
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<tr>
<td>• Local self-goverment units</td>
<td>• Leasing agreements, direct investments, equity</td>
</tr>
</tbody>
</table>

**★★★★★**

• Donations, etc.