THE COSTS OF INACTION WITH RESPECT TO HUMAN HEALTH IMPACTS FROM POLLUTION
Presentation by Dr. Fernando Tudela, Deputy Minister for Planning and Environmental Policy, Mexico

EPOC High-Level Special Session on the Costs of Inaction

Paris, 14 April 2005
Slide 1

MEXICO COSTS OF INACTION

EPOC HIGH-LEVEL SPECIAL SESSION
ON THE COSTS OF INACTION

THE COSTS OF INACTION WITH RESPECT TO HUMAN HEALTH
IMPACTS FROM POLLUTION

Dr. Fernando Tudela

Paris, 14th April 2005

Slide 2

MEXICO COSTS OF INACTION: WATER

- Infectious intestinal diseases caused by untreated water

<table>
<thead>
<tr>
<th>Year</th>
<th>Total cases* (Millions)</th>
<th>Costs (Million USD)</th>
<th>Cost of medical attention per patient</th>
<th>Total cost of medical attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>4,768</td>
<td>330.2</td>
<td>35.5 (US Dollars)</td>
<td>169.2</td>
</tr>
<tr>
<td>2002</td>
<td>4,462</td>
<td>309.0</td>
<td></td>
<td>158.4</td>
</tr>
<tr>
<td>2003</td>
<td>4,260</td>
<td>295.1</td>
<td></td>
<td>151.2</td>
</tr>
<tr>
<td>2004</td>
<td>3,820</td>
<td>264.7</td>
<td></td>
<td>135.6</td>
</tr>
</tbody>
</table>

TOTAL COSTS (Million USD)

499.4 467.4 446.3 400.3

* Infections: Shigellosis, intestinal amebiasis, cholera, typhoid fever, paratyphoid and other salmonellas and other intestinal infections due to ticks and other arthropods.

Source: Calculations by the Mexican Institute of Water Technology (IMTA) based on statistics from the Ministry of Health.
Power plants: major contributors to atmospheric pollution

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Volume (million tons)</th>
<th>Proportion of total emissions Energy Sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>101.28</td>
<td>73</td>
</tr>
<tr>
<td>SO₂</td>
<td>1.69</td>
<td>31</td>
</tr>
<tr>
<td>NOx</td>
<td>0.46</td>
<td>82</td>
</tr>
<tr>
<td>TSP</td>
<td>0.11</td>
<td>37</td>
</tr>
</tbody>
</table>

Costs

Mexico’s 13 major power plants are thermoelectric and they produce 48% of the total electricity, but they account for 70% of total emissions from energy production and caused health problems costing the economy an estimated 465 million USD in the year 2000.¹

According to different scenarios, reducing 50% of these emissions would cost between 100 to 400 million USD.

---

A 10% improvement in air quality indicators in Mexico City would generate reductions in health care costs of approximately 2,000 million USD per year.¹

The estimated cost of the reduction of Sulphur in gasoline from current level of 300 ppm to 50 ppm in 2008 is 2,050 million USD.

The morbidity due to suspended particles costs 0.36 million USD.²

---
