Green fiscal reform

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## Overview of Swedish Environmentally Related Taxes

<table>
<thead>
<tr>
<th>Category</th>
<th>Revenues Billion €(^1) (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Energy tax</td>
<td></td>
</tr>
<tr>
<td>- electricity</td>
<td>4,80</td>
</tr>
<tr>
<td>- petrol</td>
<td>2,29</td>
</tr>
<tr>
<td>- other fossil fuels than petrol</td>
<td>1,26</td>
</tr>
<tr>
<td>B. CO(_2) tax</td>
<td></td>
</tr>
<tr>
<td>- petrol</td>
<td>2,44</td>
</tr>
<tr>
<td>- other fossil fuels than petrol</td>
<td>0,87</td>
</tr>
<tr>
<td>C. Other environmentally related taxes</td>
<td></td>
</tr>
<tr>
<td>- tax on sulphur</td>
<td>0,04</td>
</tr>
<tr>
<td>- tax on pesticides</td>
<td>1,57</td>
</tr>
<tr>
<td>- landfill tax</td>
<td></td>
</tr>
<tr>
<td>- tax on natural gravel</td>
<td></td>
</tr>
<tr>
<td>D. Vehicle related taxes</td>
<td></td>
</tr>
<tr>
<td>- tax on motor vehicles</td>
<td>1,84</td>
</tr>
<tr>
<td>- road user charges</td>
<td>1,50</td>
</tr>
<tr>
<td>- tax on congestion</td>
<td>0,08</td>
</tr>
<tr>
<td>Total (A+B+C+D)</td>
<td>9,12</td>
</tr>
</tbody>
</table>

1 Prognosis.

- Energy tax and CO\(_2\) tax = 80 % of environmentally related taxes
- Environmentally related taxes 4.9 % of total revenues (2015)

Exchange rate 1 € = 9,3754 SEK is used throughout this presentation (Official rate per 1 October 2015, 2015/C324/06)
Green taxes 1991 and onwards ….

1990/1991 tax reform

• Reduced and simplified labour taxes (- 6 billion €)
• VAT introduced on energy (+ 1.6 billion €).
• CO₂ tax introduced at a low levels combined with ca 50 % cuts in energy tax rates (+ 0.3 billion €).
• Certain investment state aid measures

Since 1991

• 2001-2006 Green tax shift; 1.6 billion €
• 2007-2013 Increased environmental taxes (+0.6 billion €), significant cuts in labour taxes
• 2014 and onwards
  – Increased taxes on pesticides and natural gravel
  – Increased energy tax on transport fuels
  – Phasing out CO₂ tax reductions
  – Public inquiries in different environmental tax areas

In Sweden no earmarking of revenues … but it may be a solution in other national contexts.
2017 National Budget Bill (20 September 2016)

• **Increased focus on environmental taxes** (which in themselves are the key drivers to change behavior and reach targets)

• **Examples of environmental expenditures**
  
  – ”Sweden’s largest climate and environmental budget ever”, includes:
  
  – 1.4 billion € 2017-2020: New investments in climate measures, fossil free transports and renewable energy, e.g.
    
    – “Climate step initiative” – local climate investments
    – Urban investments in local public transports
    – Administrative simplifications for VAT – benefits e.g. smart meter electricity
    – Climate adaptation measures
    – Railroad maintenance
    – Premium to buy cars with low emissions
  
  – 33 million €/year 2018-2040 to buy and cancel EU ETS emission allowances
Development of the Swedish CO₂ tax general level and industry level

**NOTE:** from 2008 industry outside EU Emissions Trading Scheme (EU ETS)
Real GDP and domestic CO\textsubscript{2}e emissions\textsuperscript{1} in Sweden, 1990–2014

\textbf{Real GDP and CO\textsubscript{2}e emissions}

\textit{Index, 1990=100}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart.png}
\end{figure}

\textsuperscript{1} In accordance with Sweden's National Inventory Report, submitted under the UNFCCC and the Kyoto Protocol. CO\textsubscript{2} = approx. 80 % of total CO\textsubscript{2}e emissions.

\textbf{Sources:} Swedish Environmental Protection Agency, Statistics Sweden
Swedish Experiences of CO₂ taxation, conclusions

- **CO₂ taxation ….**
  - has since 1991 been the key driver behind Sweden’s success in cutting emissions and maintaining economic growth
  - is easy to administer and gives results
  - is a cost-effective measure to reach emission reductions

- **Long term priority in broad political consensus ….**
  - involve stakeholders in discussions and analysis
  - step-by-step approach; alternatives available
The Road Forward ....

Main challenge is the transport sector
A Fossil-Free Vehicle Fleet 2030
- a major challenge for Sweden …..

- Sustainable biofuels need to be part of the solution
- General market-based instruments is a cost-effective approach
- A well-designed CO₂ tax has served us very well for 25 years – *can it play a role in the future policy design in the transport sector? Is it enough?* Only quota obligation for biofuels or in combination with a CO₂ tax on fossil carbon content?

In a global context …..
- The global community needs an increased use of carbon pricing
- Sweden’s 25 years of CO₂ taxation show that
  - it is easy to administer
  - it is a cost-effective measure to reach emission reductions
  - cutting emissions while maintaining economic growth is possible!