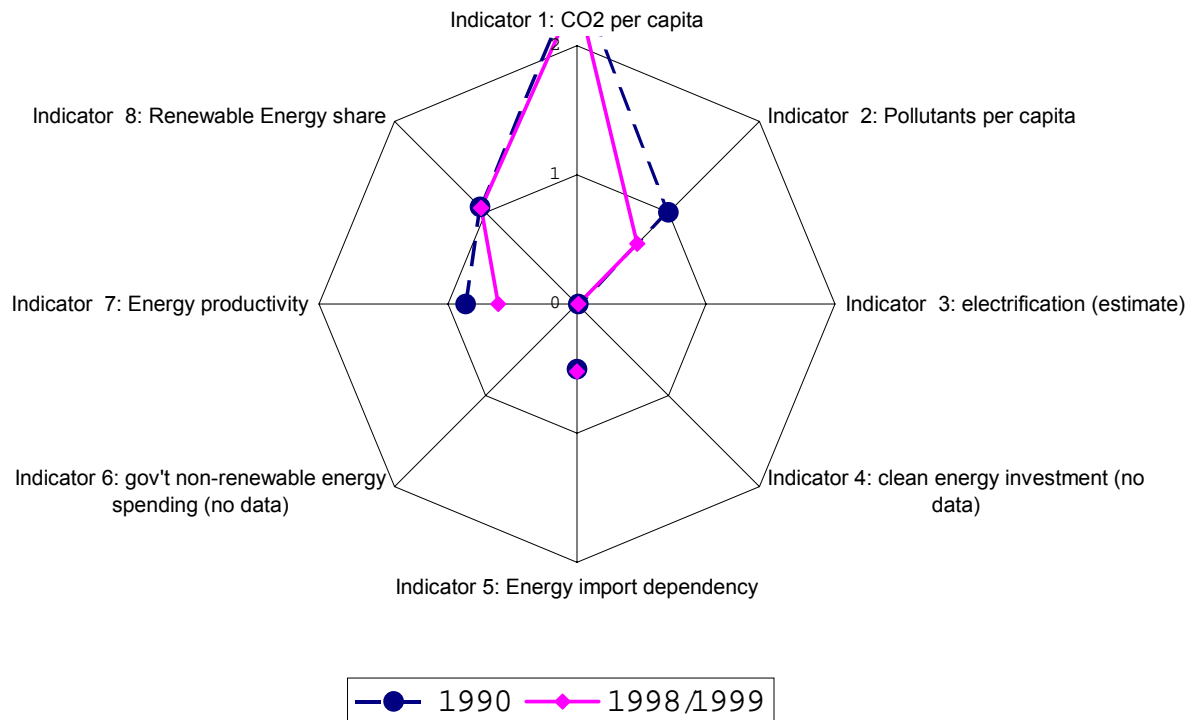


## Part II: The Eight Indicators

### ►The Star: General Discussion



The SEW "star" was designed to visualise the developments on the set of eight indicators assessed as part of the SEW reports. The indicators are grouped as pairs to measure developments in four categories: environmental, societal, economic and technological sustainability.

Each indicator operates on a scale between one and zero, thus integrating different units and measures. However, the scales are not identical; some indicators have vector values greater than one, others do not. In general, the centre of the circle (zero) refers to the sustainability goal for the indicator. The closer an indicator's value is to zero, the more sustainable it is. Indicators number 1, 7, and 8 measure each country's progress relative to 1990 global averages, whereas the other indicators are relative to the country's/region's performance in 1990.

For the SEW EU report 2002, five out of the eight indicators were evaluated. While there was no data for investment-related indicators 4 and 6, an estimate for indicator 3 was used instead of official figures.

In terms of environmental sustainability, the EU scores mixed results. While indicator 1 '*carbon emissions per capita*' improves by 5% between 1990 and 1999, it still remains at a highly unsustainable level, which is off the mark in the star above. Indicator 2 '*local pollutant per capita*' is reduced by over a third in the same period, and has progressed towards the sustainability goal. Nevertheless, current levels are still too high.

As regards societal sustainability, the lack of data does not allow for thorough analysis. In terms of '*access to electricity for all households*', the sustainability goal has been achieved. However, as the other indicators show, at the expense of other aspects of sustainability.

**SEW EU report 2002 – indicators value table**

| Sustainability        | Environmental |          | Societal |          | Economic |          | Technological |          |
|-----------------------|---------------|----------|----------|----------|----------|----------|---------------|----------|
| <i>year\indicator</i> | <b>1</b>      | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b>      | <b>8</b> |
| <b>1990</b>           | 2.53          | 1        | 0.01     | no data  | 0.51     | no data  | 0.86          | 1.06     |
| <b>1998/1999</b>      | 2.41          | 0.66     | 0.01     | no data  | 0.52     | no data  | 0.61          | 1.05     |
| <b>change in %</b>    | -5.1          | -34.2    | 0        | x        | +3.7     | x        | -29.2         | -0.9     |

In the economic sustainability category, only indicator 5 '*import share of non-renewable energy*' could be evaluated. It shows a modest increase from an already unsustainably high level of import dependency.

More progress was made in terms of technological sustainability, at least in terms of the energy intensity of the economy. Indicator 7 '*energy productivity*', already better than world average in 1990, has improved considerably between 1990 and 1999. However, there is still some way to go towards a truly sustainable path. Indicator 8, which measures '*renewable energy deployment*', has seen progress from its 1990 levels. By 1999, the renewable share of primary energy consumption (excl. large hydro power) had risen by over 30%. Certainly, the boom in wind power in particular over recent years has led to even steeper increases thereafter. However, the actual share of renewables remains negligible, which is expressed in the high indicator value (> 1). Even in 1999, the EU still lacked behind the 1995 world average in using renewable energy, and the fuel mix remains highly unsustainable.