

# ***AN ANALYSIS OF THE HISTORICAL LESSONS LEARNED WITH RESPECT TO IMPACT PARAMETERS ON THE OIL PRICE***

Reinhard HAAS, Institut für Elektrische Anlagen und Energiewirtschaft, TU Wien, Gusshausstrasse 27-29/373-2, 1040 Wien, Tel. ++43-1-58801-37352, Fax. ++43-1-58801-37397, E-mail: [haas@eeg.tuwien.ac.at](mailto:haas@eeg.tuwien.ac.at)  
Nebojsa Nakicenovic, Andreas Müller, Christian Redl, Gustav Resch, Hans Auer, Amela Ajanovic, Lukas Kranzl, Thomas Faber

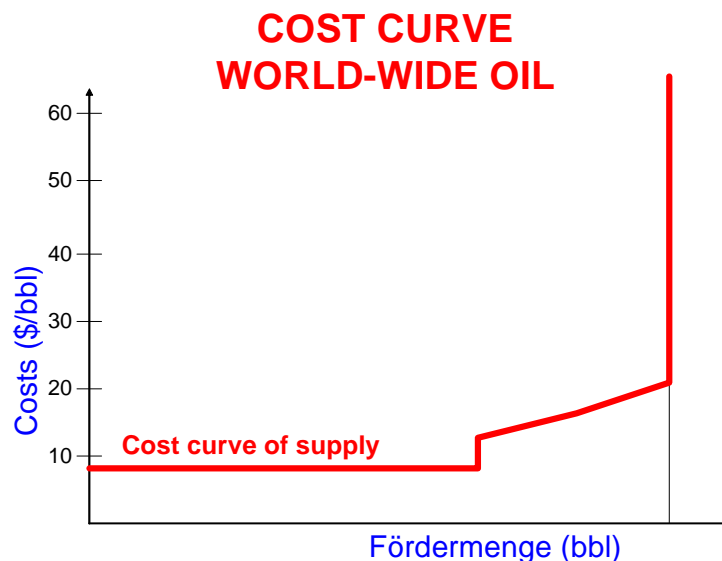
## **Overview**

At least since the oil crises of the 1970s and the dramatic price drop in the mid-1980s forecasting the oil price development has been a major challenge for energy economists world-wide. The most famous – and most embarrassing – disaster in this context was the report EMF 6 (1984) where the most famous energy economists of the U.S. predicted a further considerable rise in oil prices after 1985 to 100 US\$ and more. What we know from today and from some major papers (e.g. Wirl (1990)) is that a lot of features and indicators in the development in the early 1980s were completely misinterpreted.

The core objective of this paper is to analyse what can be learned from history with respect to typical features indicating significant price increases or decreases of the world oil price. To meet this objective it will be analysed how the trend of these parameters at some crucial points of time when the sign of the oil price development changed/ the absolute level was at a maximum/minimum developed.

## **Methods**

The methodological steps of this analysis are: (i) Discussion of the role of OPEC in the world oil market; (ii) Identification of possible relevant impact features on the development of the oil price parameters (On the supply vs the demand side); (ii) Comparison of these features between the two periods of investigation; (iii) Identification of the characteristics for a significant decrease in oil prices;



**Fig. 1.** Stylistic cost curve of oil world-wide incl. the strategic component

Figure 1 depicts a stylistic cost curve of oil world-wide including the strategic component and the actual physical cost curve of oil world-wide in 2001. Of course the strategic component – on the right hand-side in this Figure – can make the effective costs completely non-relevant, see also Wirl (2008)

## Results

The major results of this analysis are summarised in Table 1. The wide majority of the investigated features indicate no significant decrease in prices.

	<b>1981-1985</b>	<b>2003-2007</b>	<b>Necessary feature for significant oil price decrease</b>
<b>FEATURE :</b>			
<b>DEMAND:</b>			
<b>Trend in actual total world-wide oil consumption</b>	decrease	increase	decrease
<b>Projected trend in total oil consumption</b>	stagnation decrease	Increase	decrease
<b>SUPPLY:</b>			
<b>OPEC forced to .... oil supply to maintain price level</b>	decrease	increase	decrease
<b>by major OPEC-country:</b>			
<i>Saudi-Arabia</i>	decrease	increase	decrease
<i>Iran</i>	decrease	increase	decrease
<i>Venezuela</i>	decrease	increase	decrease
<i>Indonesia</i>	decrease	decrease	decrease
<i>UAE</i>	decrease	increase	decrease
<b>Spare capacity</b>			
<i>absolut</i>	high (~9 Mill bbl/day)	low (~1 Mill bbl/day)	high
<i>trend</i>	constant	slightly decrease	increase or constant
<b>USA (and other non-OPEC countries) forced to ... production to reduce price level</b>	increase	decrease	increase
<b>MARKET STRUCTURE:</b>			
<b>Share of OPEC in world-wide supply</b>	decrease	increase	decrease

## Conclusions

The major conclusions are: Currently, there are no signs that the world oil price will drop significantly. It is to expect that in 2008 and 2009 some alleviation will take place, mainly due to recent high price spikes due to speculation. Yet, all features analysed indicate that in principle a rather high price level will persist over the next four to five years

## References

BP: Statistical Review of World Energy, 2007.

EMF: EMF 6 (1984)

OPEC: Annual statistical Bulletin, 2007.

Wirl Franz: The future of world oil prices: Smooth growth or volatility? Energy Policy (10), 756-763, 1990.

Wirl Franz: Why do oil prices jump or fall? Energy Policy 2008 (in press)