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Workshop

Renewable Energy Finance

www.greenpowerconferences.com &

UNEP Sustainable Energy Finance Initiative (SEFI)

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How to Attract Private and Institutional Investors in Renewable Energy

1) National energy price framework:

not only the tariffs for the renewable energy sources wind, hydro, biomass or solar power are essential, but also the duration of the legal framework: to have a long term calculation investors mostly need at least 10 to 20 years as in Germany) years with guaranteed tariffs.

2) Currency rate effects:

a volatile local currency often makes the calculation of the return of investment (ROI) impossible.

3) Legal framework:

- What type of company is the best for foreign investors?
- Are the shares listed at a stock market or otherwise tradable?

4) Types of investment:

- Bond or **equity**? There are only a few banks specialised on renewable energy projects in Central and Eastern Europe. But there is an increasing number of venture capital companies and investment funds that are willing to invest at a full risk equity base. German wind power development companies look for projects in other countries (like Portugal and Greece) as the own country – with more than 15.000 wind mills – offers fewer sites with sufficient wind (and no protests from the people living nearby). Even some private investors look for opportunities in Central and Eastern Europe. But most investors in Renewable Energy like to have a “pure play”.

5) “Pure Plays”:

- The target company should have renewable energy as its **only** business. Most of the Western “green” investment funds have **exclusionary criteria** like “Companies are excluded that produce and/or market nuclear energy or technology”.
- Sometimes companies are excluded if they are substantial shareholders of the “banned” companies or if their management is influenced substantially by those companies (e.g. through capital investment, controlling interest, blocking minorities, executive shares or supervisory board majorities).

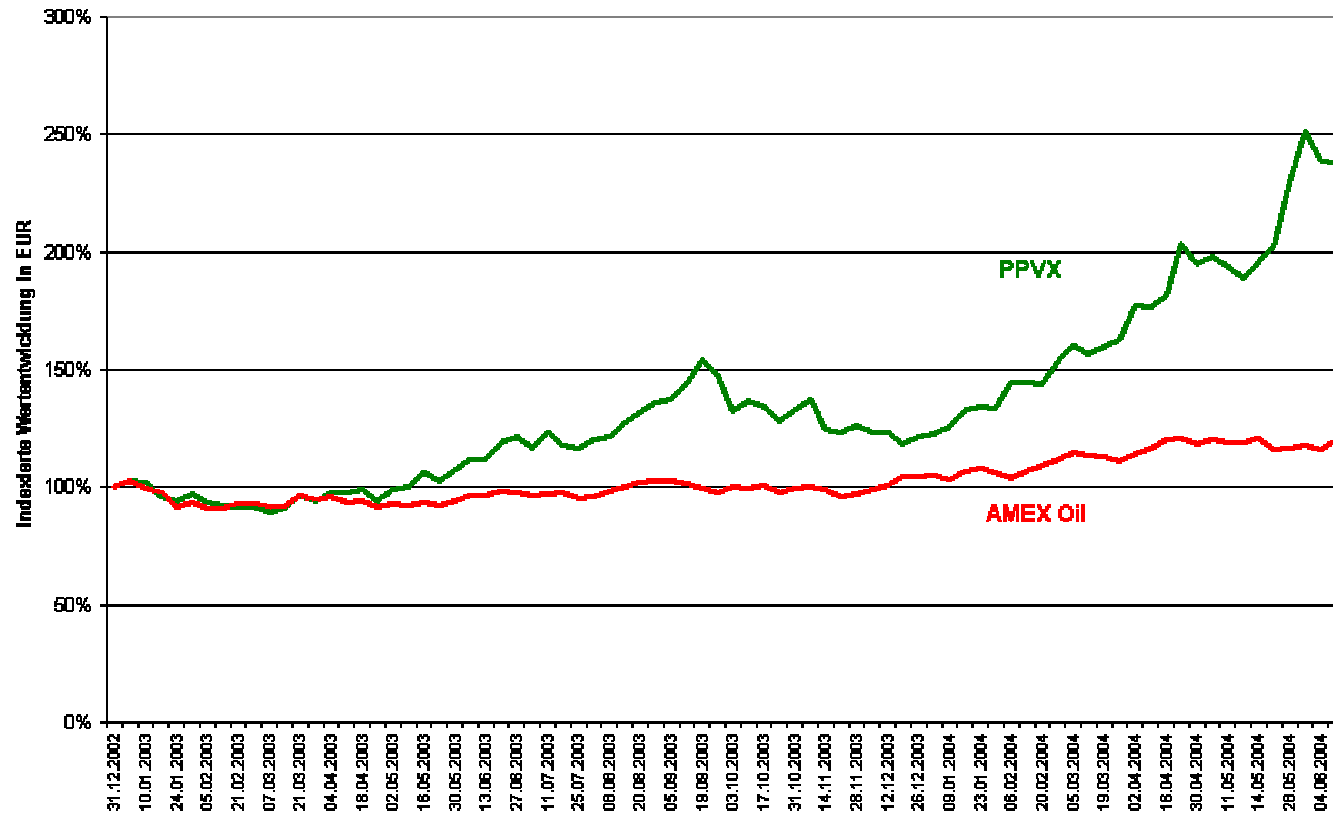
- On the other hand it is often sufficient to fulfill the **positive criterium** **”renewable energy”** to be eligible for a green fund or index.
- The **Photon Photovoltaic stock index** (PPVX, launched in 2001) requires to have at least 50% of the turnover in the field of photovoltaics. The 14 international stocks from Germany, the USA, Australia, Canada and Taiwan have a combined market capitalisation of more than 1.000 million Euro:

Photon Photovoltaic Stock Index

Country	Company	Industry	price Sept. 04	% since 1.1.
•				
•	CAN Arise Technologies	PV module wholesale	0,25	-54,5
•	USA DayStar Technologies	Solar cell development	2,14	-13,4*
•	USA Energy Conversion Devices	Solar cells, batteries	13,96	+54,6
•	USA Evergreen Solar	Solar cells	2,98	+77,4
•	RC Motech Industries	Solar cell & modul prod.	95,00	+51,3*
•	D Phönix SonnenStrom AG	PV modules & systems	4,00	0,0
•	D S.A.G. Solarstrom AG	PV power plants	4,05	+107,7
•	AUS Solar Energy Systems Ltd.	PV modules, pumps etc.	0,25	+38,2
•	D Solar-Fabrik AG	PV modules	8,20	+148,5
•	USA Solar Integrated Technol.	PV roof systems	1,805	-3,2*
•	D SolarWorld AG	PV-modules, wafers, wholes.	28,75	+173,8
•	D Solon AG	PV modules & engineering	12,00	+424,0
•	D Sunways AG	Solar cell & modul prod.	3,71	+106,1
•	USA WorldWater Corp.	solar water pumps	0,34	+151,9
•	int. PPVX	solar stock index	691	+106,9

• * since member of the PPVX (after 1-1-2004)

PPVX vs AMEX Oil Index



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