

The background of the slide is a golden-yellow color with a faint world map. In the center, there is a stylized logo consisting of a vertical line with three arrows branching out from the top: one pointing up, one pointing left, and one pointing right. The text "World Future Council" is overlaid on this logo.

# World Future Council

Dirk Hendricks | Director, EU Liaison Office

## **Networking for Renewables**



## The World Future Council

„...an international green think tank“

**Economist.com**

英文中國郵報

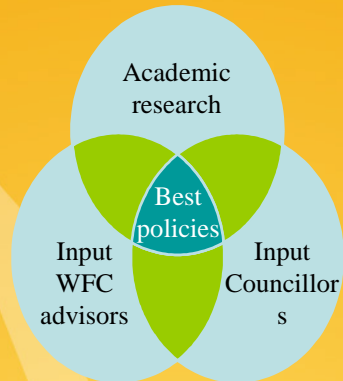
**The China Post**

“...a non-governmental organization with the goal to work for a sustainable future in the fields of environment, peace and human rights.

„the Club of Rome with a campaign department“



## Providing Policy Solutions



### The Council

- works closely with policy-makers and civil societies
- identifies, develops and helps to implement “Best Policies”
- provides concrete solutions to key environmental, social and economic issues
- turns the focus towards climate change as an overarching issue



www.onlinepact.org

**PACT**  
Policy Action on Climate Toolkit



The PACT project aims to provide the necessary elements for rapidly introducing policy to combat climate change - giving parliamentarians, civil servants, and advocates around the world access to the legal and technical expertise needed to envisage, to argue for and to enact laws and policies that effectively protect the climate. Find out more...

World Future Council

## The world urgently needs good FIT laws

**Feed-in tariff (FIT) laws have proved the most effective approach for increasing and accelerating the deployment of renewables in the electricity sector.**

**This site aims to help users around the world to introduce or improve FIT laws in their country or region.**

Tackling climate change means rapidly changing the way we generate and use energy. We can only achieve this with an effective policy framework for promoting renewable energy and energy efficiency. FITs are a crucial element of any such framework.

### Before you start drafting



Check you have answered the most important questions we think legislators must address before proposing any FIT law.

### Features of a good FIT law



We outline the essential features of a good FIT law, and give you the opportunity to draft the basic elements of a proposed law.

 Search

Home

About the PACT project

Sitemap

Contact us

What is a FIT law?

Before you start drafting

Features of a good FIT law



World Future Council

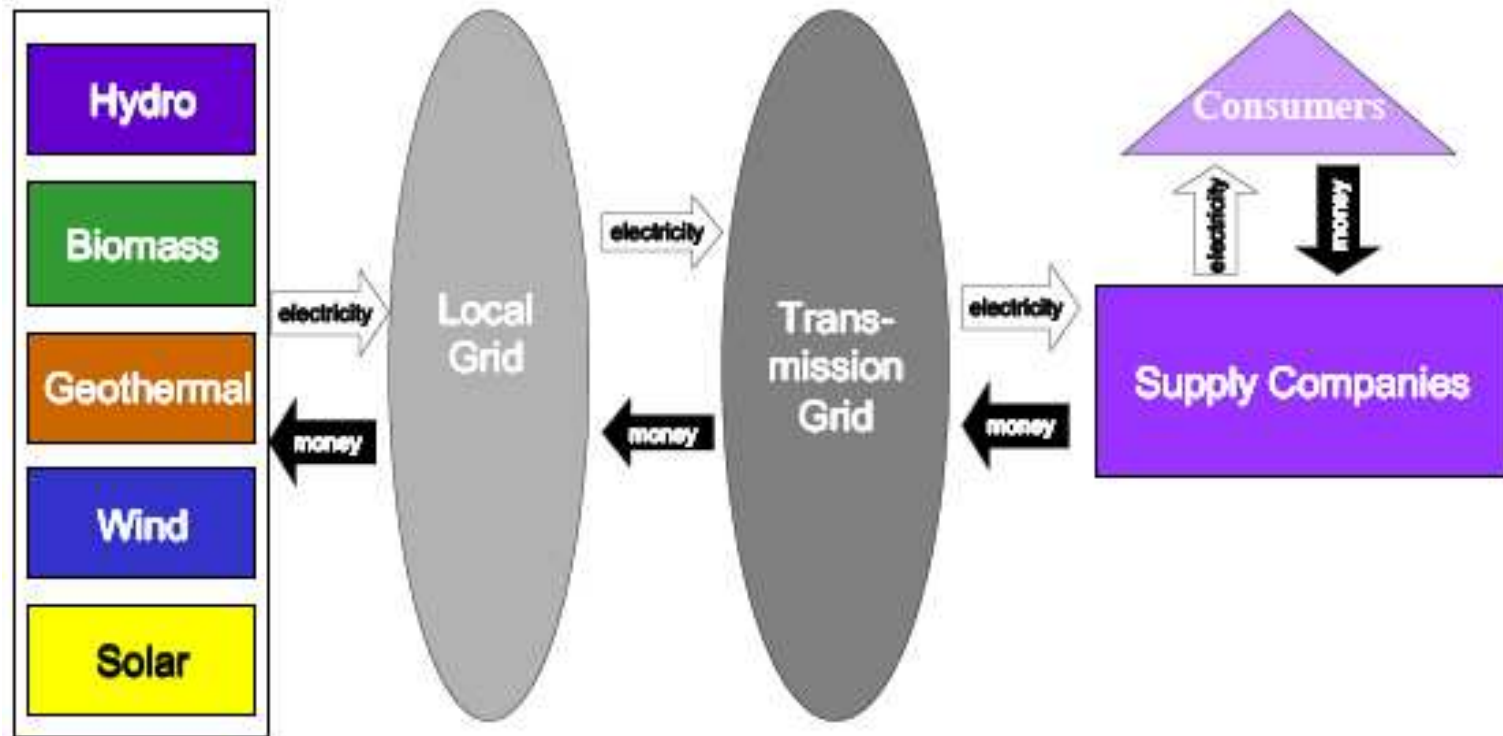


## Characteristics of a Feed-in Tariff

- Gives RE priority access to the grid
- Obliges grid operators to purchase electricity from RES
- Sets the price for RE electricity for fixed periods
- Sets no limit to amount of RE feeding into the grid



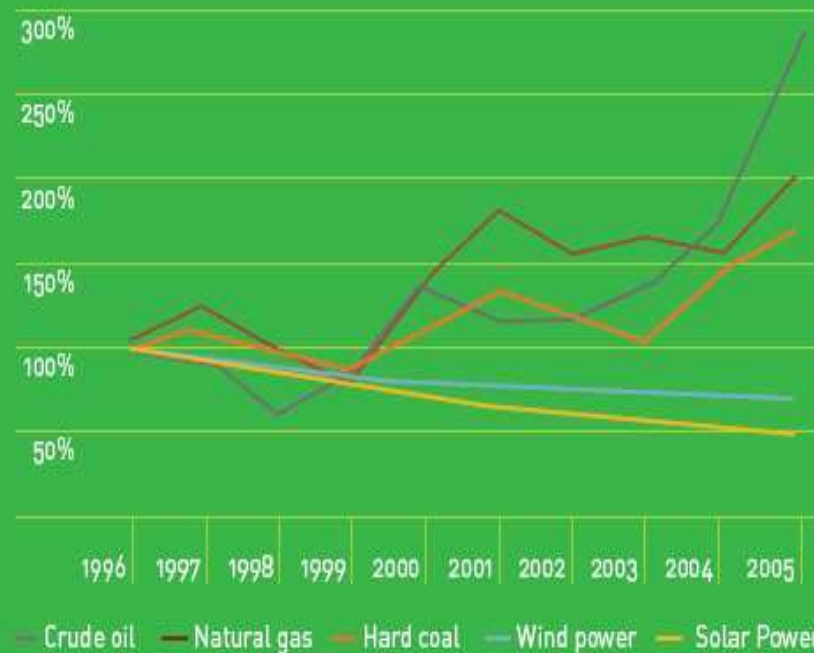
# Promoting Renewables: Concept of Feed-in Tariffs





# Costs of Feed-in Tariffs

## Price development for different energy sources



Sources: Federal Office of Economics and Export Control, Tecson, German WindEnergy Association, German Solar Industry Federation

## Renewable energy is affordable



For a price of 19.6 Euro cent per kilowatt-hour electricity

only 0.5 cents are due to renewable energies

The average household pays 1.50 Euros per month for noticeable ecological relief by renewable energies

- 6.0 ct network utilisation
- 4.3 ct power generation
- 2.7 ct VAT
- 2.1 ct power tax
- 2.0 ct licence fee
- 1.0 ct marketing
- 1.0 ct measurement costs
- 0.3 ct allocation for cogeneration

Source: German Renewable Energy Federation

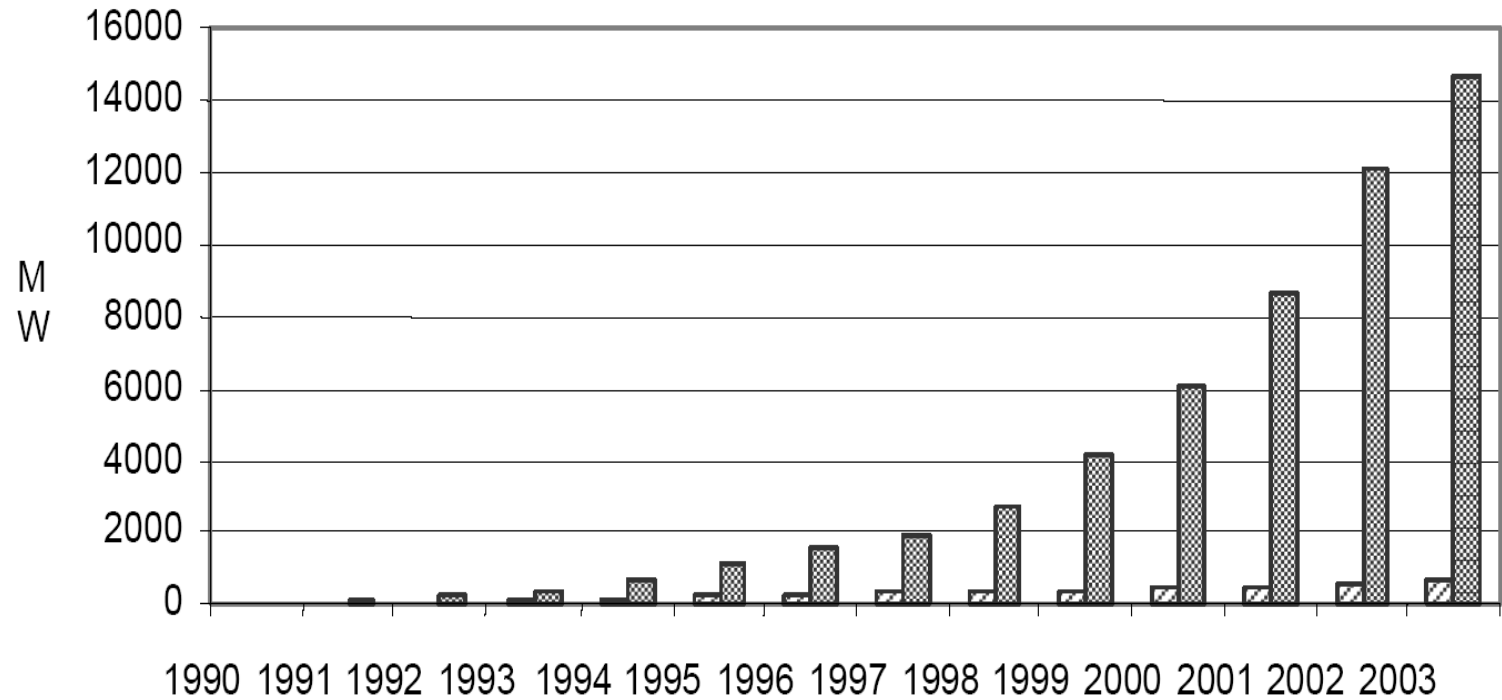


## Achievements in Germany within only Six Years

- 250,000 jobs created
- 40 million tonnes of CO<sub>2</sub> saved directly from EEG
- 11.8% share of final electricity consumption from RES achieved
- €21.6bn turnover for German RE companies (2006)
- €8.7bn investment per year
- All this for a monthly cost of €1 per household



## Comparison of Quota-System vs. Feed- in system



Germany – Feed-In system



UK – Quota-System- and Auction-based system



## Renewables on the Rise

- 2008 Renewable Energy Directive (20-20-20)
- Potential EU goal of 30% CO<sub>2</sub> emissions reductions if post-Kyoto Agreement
- EU vision for 2050: 80% renewables
- Post-Lisbon Strategy
- 3<sup>rd</sup> Strategic Energy Review
- National Action Plans under 2008 RE Directive



## Getting the Priorities Right

- Grid enhancement and enlargement as prerequisite for a large share of renewables in EU energy mix after 2020

### **2 major tasks for Europe's network**

- linking remote RE production areas with consumer centres
- handle greatly increased local production

### **Technical and legal network updates to allow**

- secured and constant electricity supply
- balanced cross-border electricity flow
- local feed-ins to city distribution networks
- guaranteed access for all levels of renewable energies



## Inter-connecting Networks and Renewables

- Grid enhancement and enlargement as prerequisite for a large share of renewables in EU energy mix
- WFC supports a combination of supergrid and smart grid technologies.

### Concept:

- Smart grids on local and regional level
- HVDC power lines for efficient energy transfer to high demand areas
- Decentralized multinational production sources to minimize renewable energy's variability



## Non-technical Suggestions for Grid Enhancement

- Guaranteed grid access to renewables
- Increased numbers of cross-borders interconnections to address production variability & electricity wastage
- Enforced cooperation on EU level by EU regulators
- Proper separation between generating & transmission affiliates (un-bundling)
- Promote private investment through stable legal and financial frameworks

# Thank you!

World Future Council

EU Liaison Office  
Rue Marie-Thérèse 21  
1000 Brussels  
Belgium  
Tel.: +32 2 230 1780

[www.worldfuturecouncil.org](http://www.worldfuturecouncil.org)



## WFC Impact of the Renewable Energy Work

