# World Future Council

Dipl. Ing. Stefan Schurig | Director Climate Energy

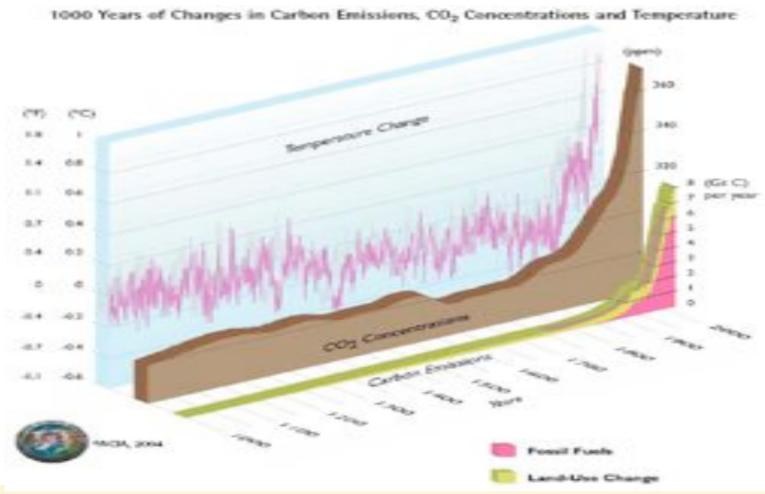
## FIT for Future

**Creating Strong Markets for Renewable Energy** 



### Climate impact of industrilisation

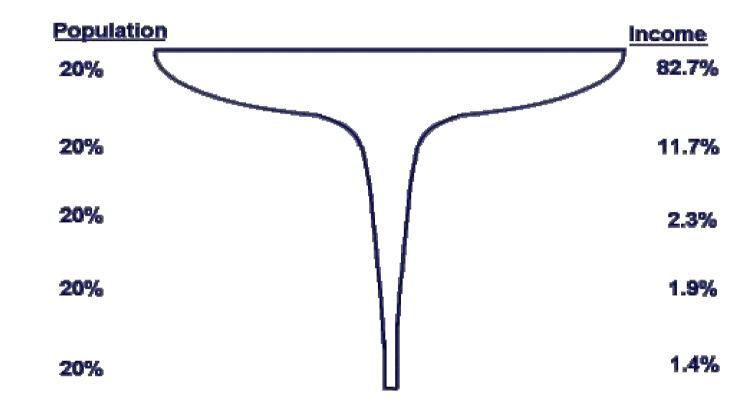








### Climate of Justice?







### Dynamic of change



### Increasing



Energy demand
Energy costs
CO2 emissions and
pollution
Sea levels
Health costs
Climate instability

### **Decreasing**

Fossil fuel reserves
Biodiversity
Natural resources
Rural populations
Faith in
governments
Time left for action





### Quo vadis?









### Three Pathways to sustainable energy

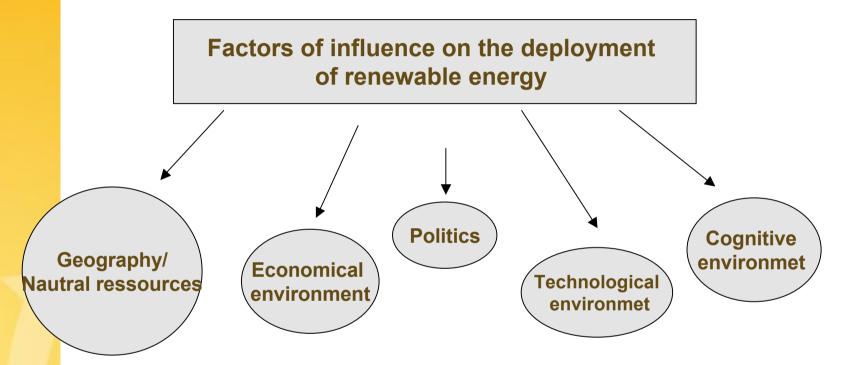


- Increase energy efficiency and energy saving
- 2. Develop domestic renewable energy sector
- 3. Creating an intelligent allocation grid





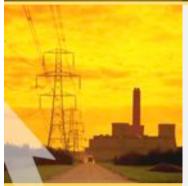
# What matters when pushing renewable energy in the markets







# Promoting Renewable Energy and fostering energy independancy











### Feed in legislation...

- -makes RE electricity priority
- -Obliges grid operators to purchase electricity from RES
- -Sets the price for RE electricity for fixed periods and gives investment security
- -Sets no limit to amount of RE feeding into the grid





### Important corefeatures to be taken into account

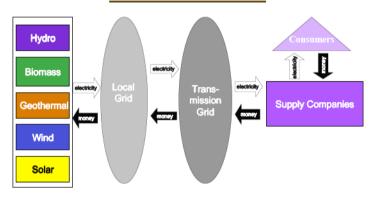
- Costs of connecting need to be paid by the energy companies
- •Ensuring maintenance due to a long term incentive
- Tariff must be adjusted to the state of development of the technology





### Financing of Feed in tariffs

# Via all electricity consumers



- Impact on electricity price
- + independence of state-budget

# Via a national fund or state budget

- + no impact on electricity price
- (no) secure incomes for the fund





### FITs – a story of success

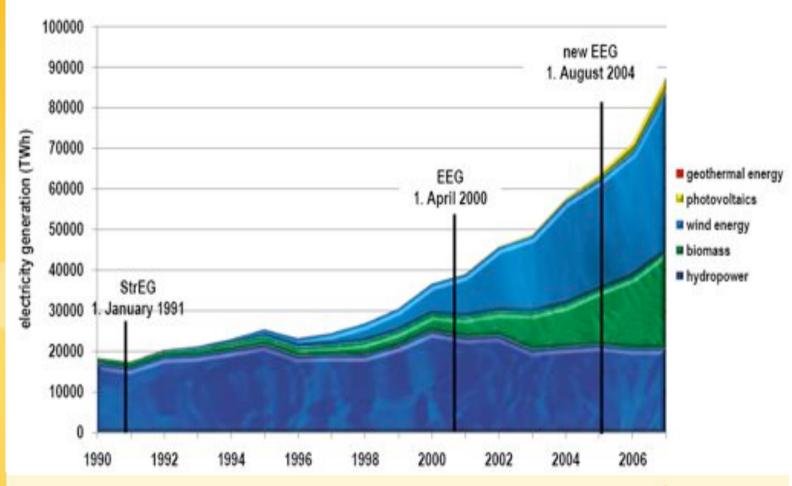
Table 1: Key data on renewable energies in Germany 2006/20071

	2006	2007	Changes
Share of RE <sup>2</sup> in total final energy consumption <sup>3</sup>	7.5 %	8.5 %	+ 13.3 %
Share of RE in total gross electricity consumption	11.7 %	14.2 %	+ 21.4 %
Share of RE in total final energy consumption for heating <sup>4</sup>	5.8 %	6.6 %	+ 13.8 %
Share of RE in fuel consumption <sup>5</sup>	6.3 %	6.9 %	+ 9.5 %
Share of RE in total primary energy consumption	5.5 %	6.7 %	+ 21.8 %
Emissions avoided due to use of RE <sup>5</sup>	ca. 98 m t	ca. 114 m t	+ 16.3 %
- Of which, share attributable to EEG	ca. 44 m t	ca. 57 m t	+ 29.5 %
Total turnover from RE Of which:	ca. € 22.4 bn	ca. € 24.6 bn	+ 9.8 %
- Turnover from construction of plants	ca. € 11.1 bn	ca. € 10.7 bn	- 3.6 %
- Turnover from operation of plants	ca. € 11.3 bn	ca. € 14.0 bn	+ 23.9 %
Employees in RE sector	ca. 236,000	ca. 249,000	+ ca. 5.5 %





# Development of electricity generation from RE in Germany, 1990-2007



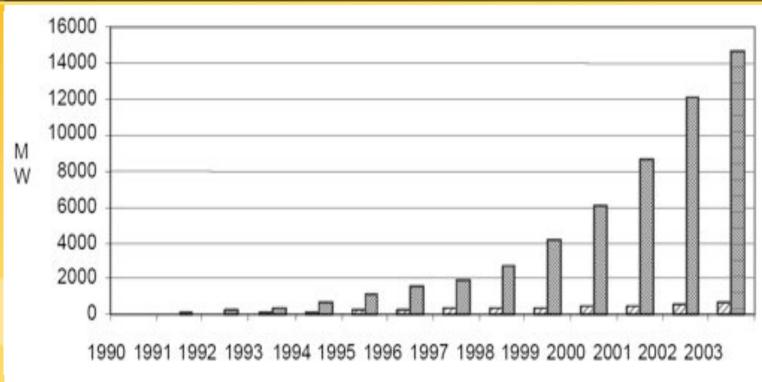


Source: BMU March 2008
Dipl. Ing. Stefan Schurig | Director Climate Energy | stefan@worldfuturecouncil.org





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



Germany – Feed-In system



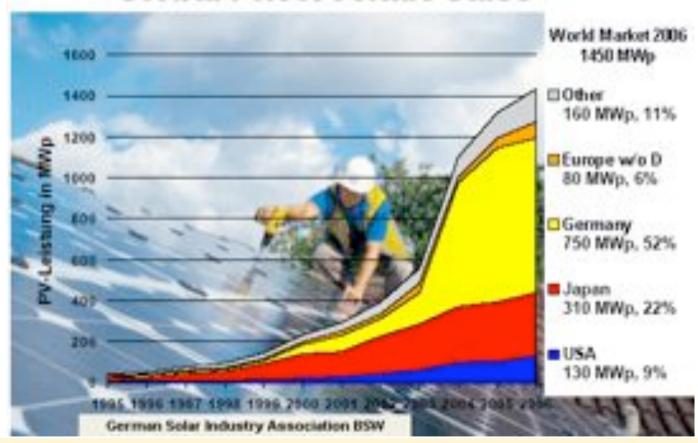
UK – Quota-System- and Auction-based system





### Germany's PV share

### Global Photovoltaic Sales

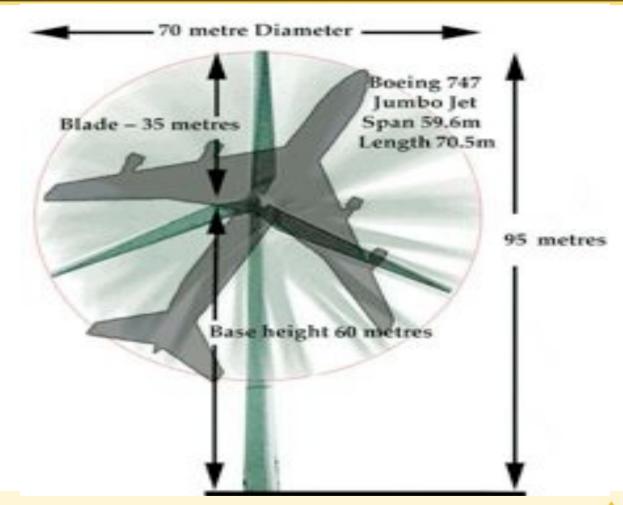














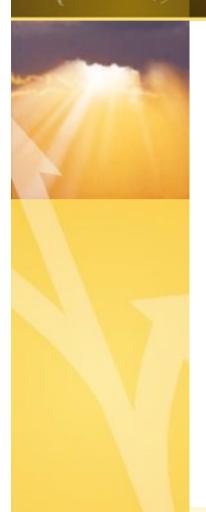








## "Empowerment" of policymakers









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The PACT project simile to provide the necessary elements for rapidly introducing policy to comban climate change is giving peritamentarians, civil servents, and advocates around the world access to the legal and technical expertise needed to envirage, to argue for and to etact laws and policies that effectively protect the climate. Find set thore.

#### World Future Council

#### The world urgently needs good FIT laws

Feed-in tariff (FLT) 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

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#### FITs 'in-depth'

From this page, you can did "repth' into 9 recent EU and US studies demonstrating the advantages of FTFs, semanting them with other support mechanisms, and considering how they can be combined.

From each of the summaries below, you can access a short synopsis of the study, and the full document:

A 2007 study examining whether feed-in tariffs can work with existing and proposed US state-level policies and electricity market structures, responding to 3 common arguments used in the US against FITs, and concluding that feed-in tariffs can work in US states

m More...

A 2007 study analysing the support schemes in place in EU member states, concluding that more than 34% of electricity consumption can be provided from renewable energy sources by 2020 with improved national policies

a More...

A 2007 study examining the economic impact of climate change, finding that feed in tariffs have led to more electricity being produced from renewable energy sources at lower costs than RPS/TGC schemes

■ More...



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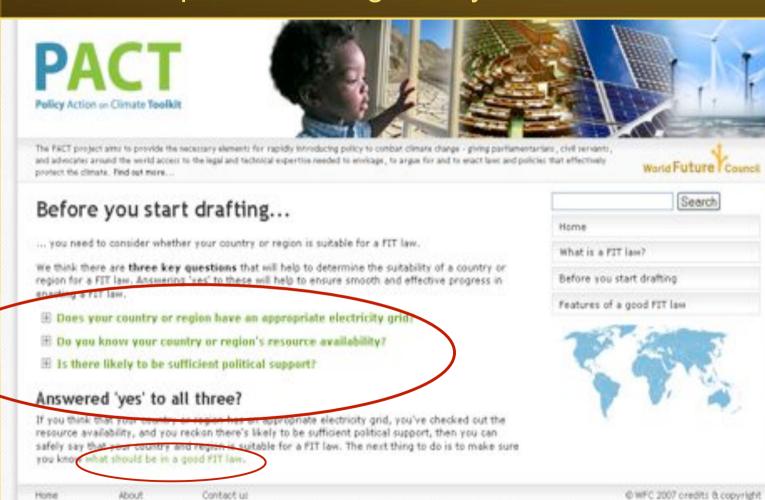
Features of a good FIT law







### The online platform that guides you...







#### ...to the first draft!

