

Disclaimer: The views expressed are those of Paul Gipe and are not necessarily those of the sponsor.

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Assessing Federal Renewable Energy Policies

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by
Paul Gipe

Paul Gipe, wind-works.org

Tera Kora, Curaçao, Netherlands Antilles

Assessing Federal Renewable Energy Policies

- **There is no Coherent Policy**
 - Mishmash of Programs
 - RE's Gore Some Very Powerful Oxes
- **Congress Dysfunctional**
- **Policy Action is at the State Level**
 - For the Foreseeable Future

North America Needs Massive Reconstruction of Its Infrastructure

Renewable Energy Development Can Reindustrialize the North American Economy

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Noordoostpolder, The Netherlands



North American RE Market Growth

- Exciting, Yes
- Significant, Yes
- Not Nearly Enough
by Any Standard

Paul Gipe, wind-works.org

Buffalo Ridge, Minnesota



Challenges in North America

- **Piecemeal Policy Approach**
Too Slow
RPS for Wind, Subsidies for Solar
- **“Cheap Energy Contract”**
Cheap Today--Expensive Tomorrow



Challenges in North America

- **Low Program Caps**

 - California: 33%?

 - LABC-Los Angeles: 3%

 - Oregon: 25 MW! (Why Bother?)

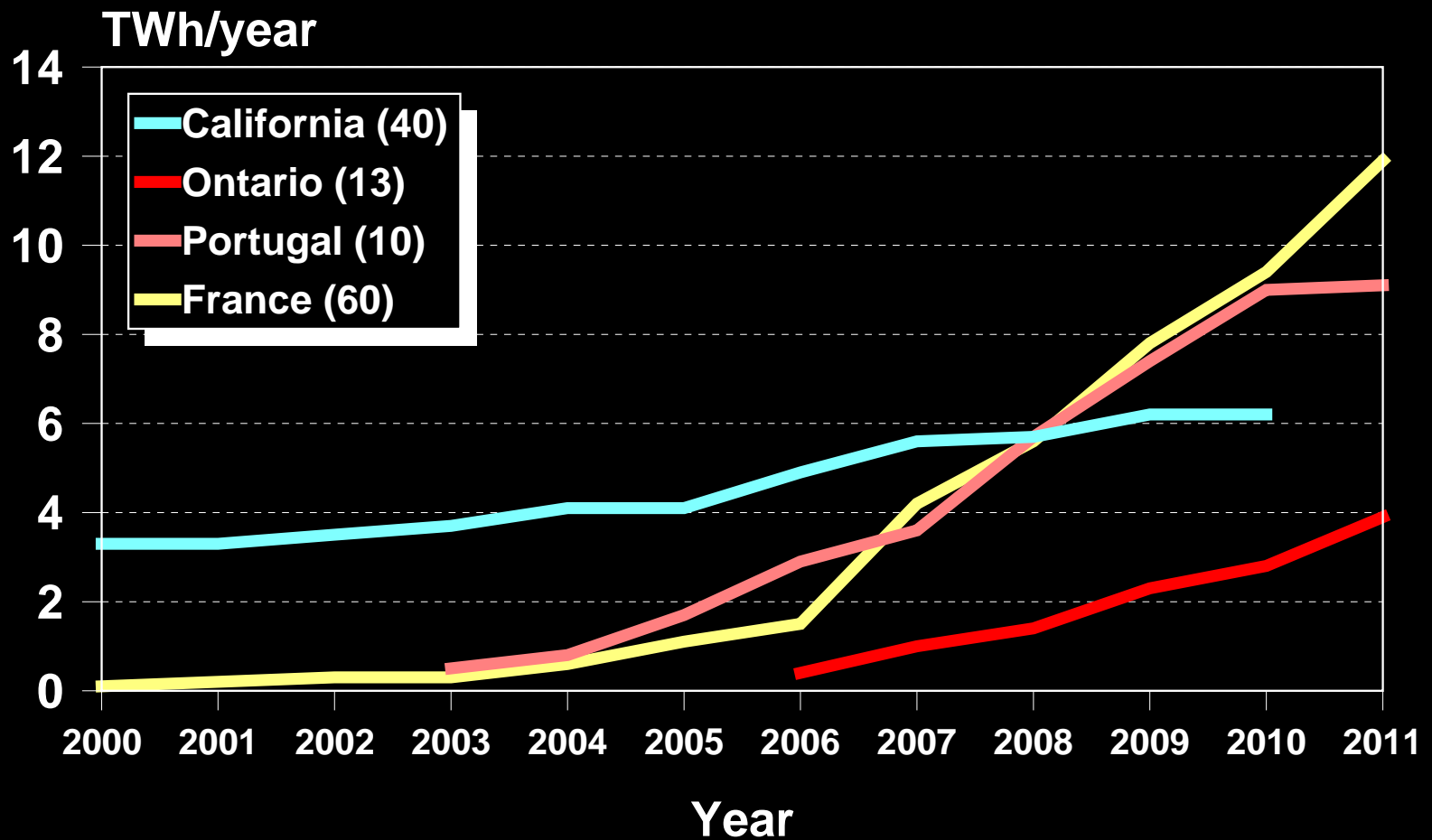
- **Solar Only or Wind Only**

- **Timidity & Lack of Vision**

 - Do We Want Renewables or Don't We?



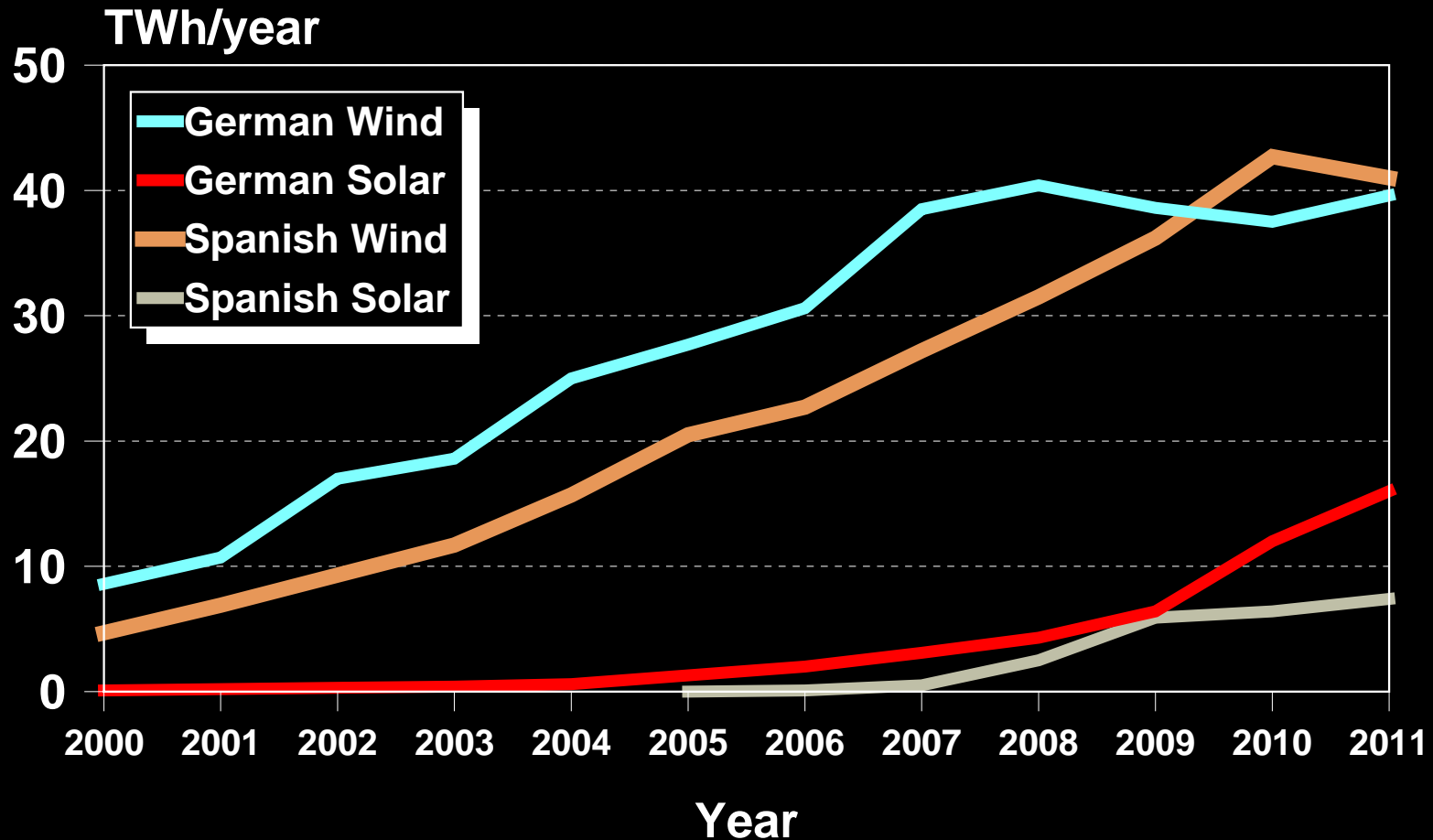
Wind Generation Growth in Selected Markets



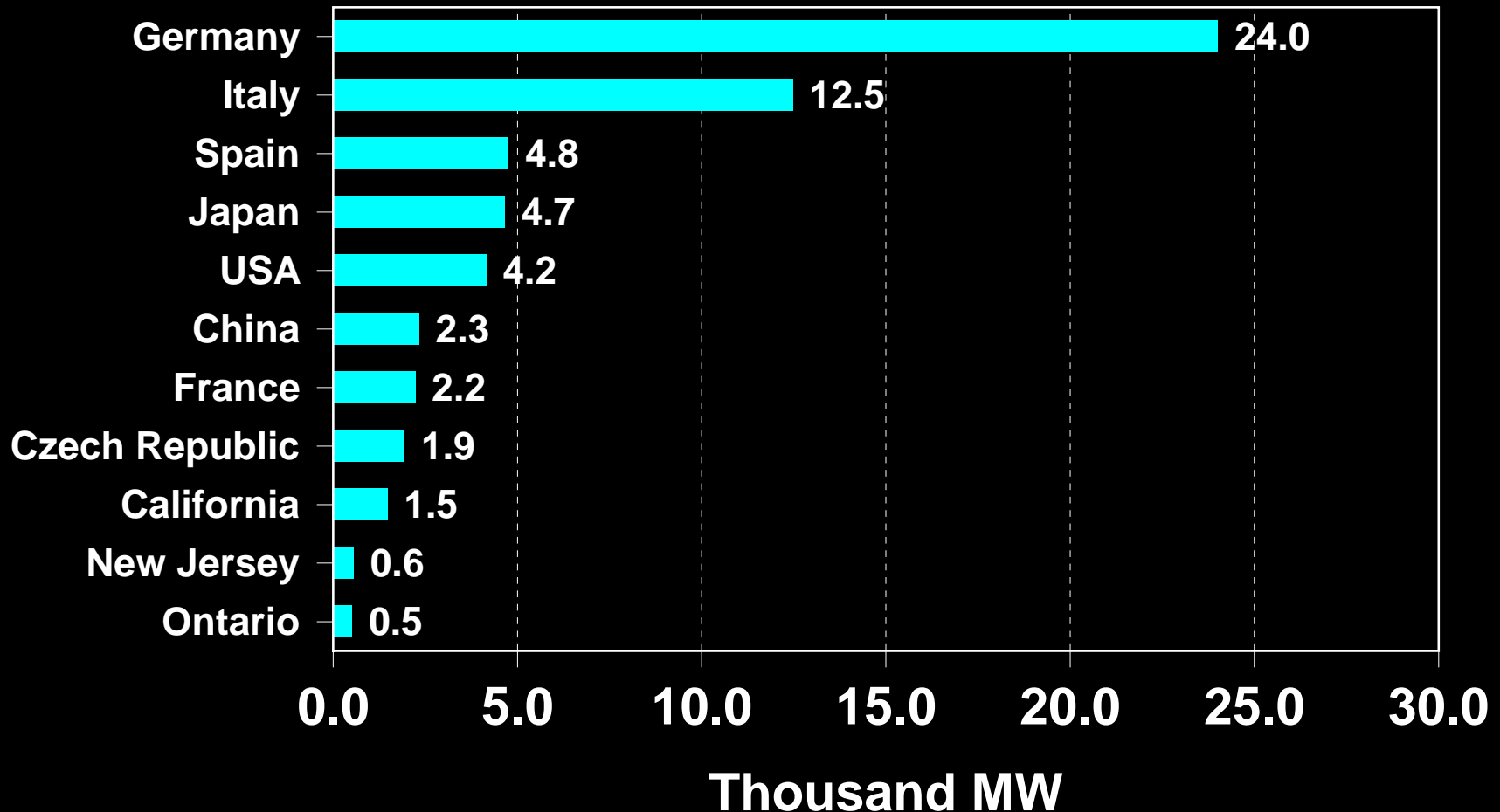
Population in Millions

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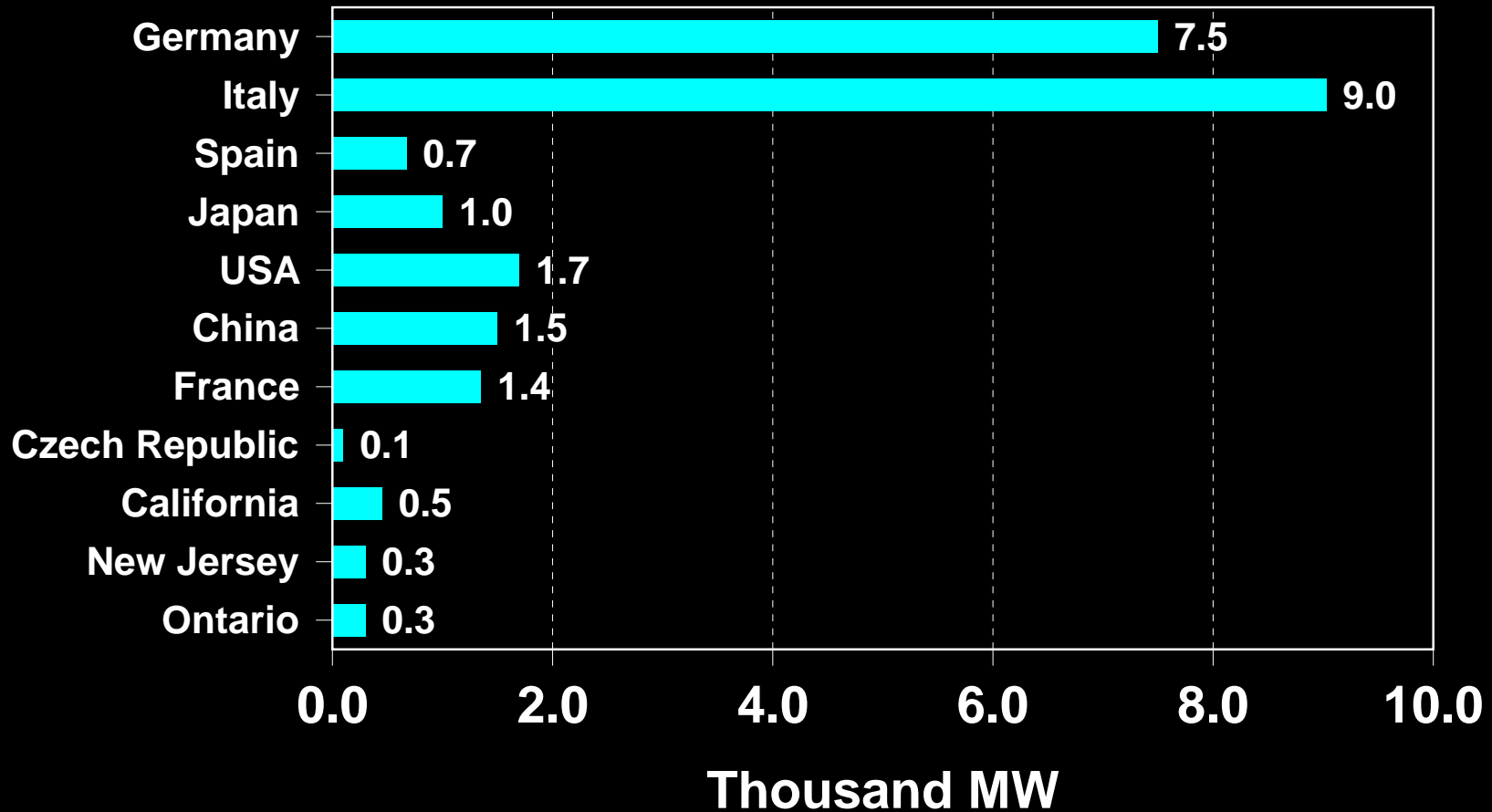
German and Spanish Wind & Solar Generation



Leading World Solar PV Markets Total Installed 2011



Leading World Solar PV Markets Installed 2011



RFPs & Bidding Fails to Deliver Renewable Energy Equitably

- **Fails to Bring on Renewables**

 - at the Pace & Price Bid**

 - Typically 50% of Contracted Capacity**

 - Lumpy Development--No Manufacturing**

- **Limits Participation**

 - Undemocratic & Exclusionary**

- **Europe Has Moved to FITs**

 - Germany's Jeffersonian Rebels**

Electricity Rebels--the Rallying Cry

**“Wind is a Local Resource. It is Our Resource. And We Want to Make Money from it.”--Wolfgang Paulsen
(*Stromrebelle*)**

Friedrich-Wilhelm-Lübke-Koog, Germany

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Rebel Agenda

- **We Want Renewable Energy**
- **We Can Do It Ourselves**
- **We Bring Our Own Risk Capital**
 - and Invest in Our Own Region
- **We Accept the Change**
 - in the Landscape that Results

Hans-Detlef Feddersen on the Bürgerwind Movement.

Landau, Rheinland-Pfalz, Germany

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The Farmers of Nordfriesland

- **0.5% of California**
2,000 km²; 165,000 Population
- **850 MW of Wind**
90% Community-Owned
6,000 Investors (4% of Population)
<1% of Land Area
- **1.3 TWh/yr**
More than Altamont, More than San Geronio
~Tehachapi Pass
€100 million (\$150 million)/yr



Local Entrepreneurs Building Local Projects

- **2.6 MW Locally Owned Solar Plant**
- **Locally Developed, Locally Built,
Locally Owned**

Nico Petersen, Solar Park Rodenäs

Paul Gipe, wind-works.org

Dardesheim

The Renewable Energy Village

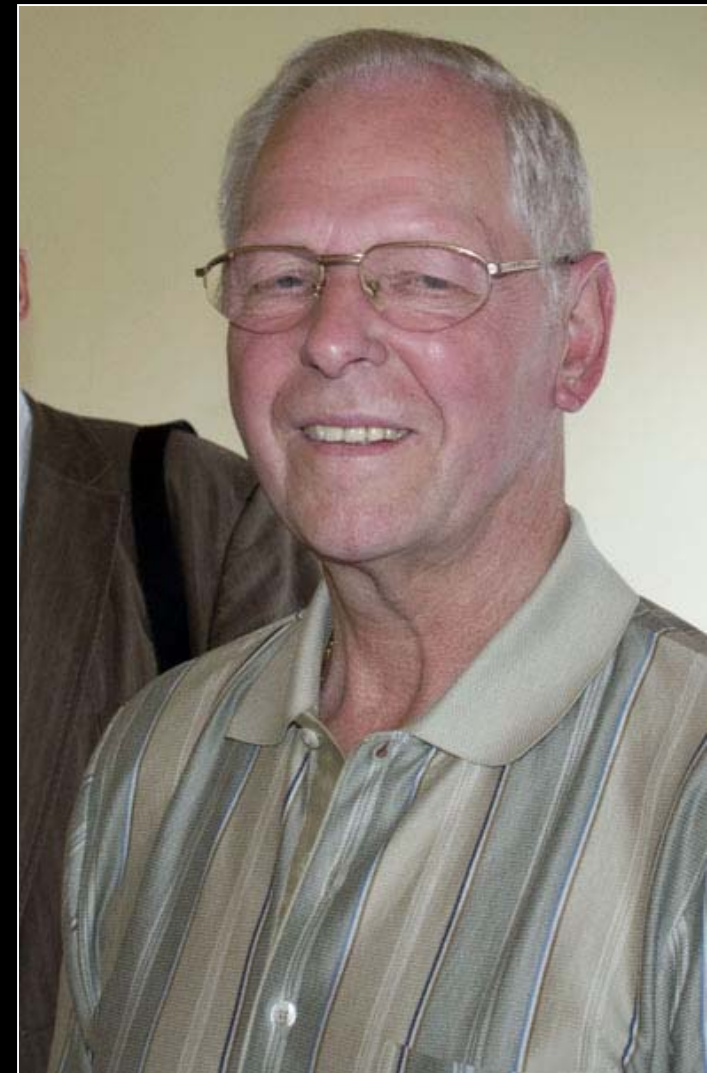
--A Revolution in the Former DDR



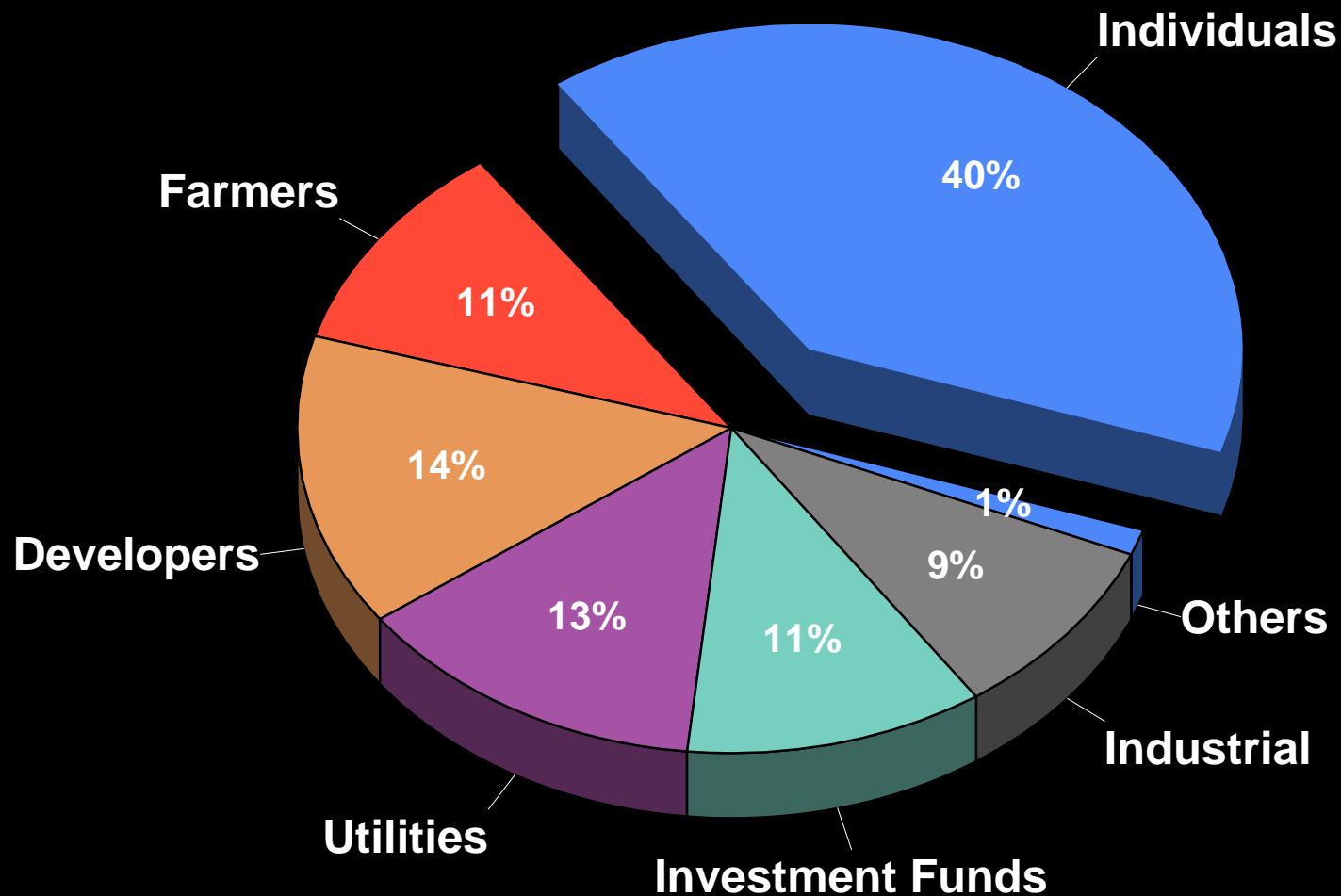
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Meet the Proud Mayor of Dardesheim Bürgermeister Rolf-Dieter Künne

- Proud of Männerchor
- Proud of Brass Band
- Proud of Wind & Solar
100% Renewable Energy



German Ownership of Renewables in 2010: 53,000 MW



www.unendlich-viel-energie.de

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Renewable Tariffs in North America ... Unthinkable?

- **Yes--At One Time**
 “You’re Absolutely Nuts!”
 Andy Karsner, DOE, 2006
- **Today? No**
- **Now Possible**
- **Growing Trend**
 in North America
 & Developing World
 China, Mongolia, Uganda

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Gaspé, Quebec

Where?

- Mongolia
- Sri Lanka
- Bulgaria
- Bosnia
- Switzerland
- Germany
- Spain
- Ireland
- China
- Slovenia
- Thailand
- Croatia
- Great Britain
- France
- Portugal
- Uganda . . .

Partial List of Countries with Feed-in Tariffs

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Yorkshire, Great Britain



Gaspé Peninsula, Quebec

No Time for Half-Measures

No Time to Lose

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Time for North Americans to Take the Road to the Future



Freiburg, Germany

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