

Time to get real



World Energy Trilemma

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Paris, 24 April 2014



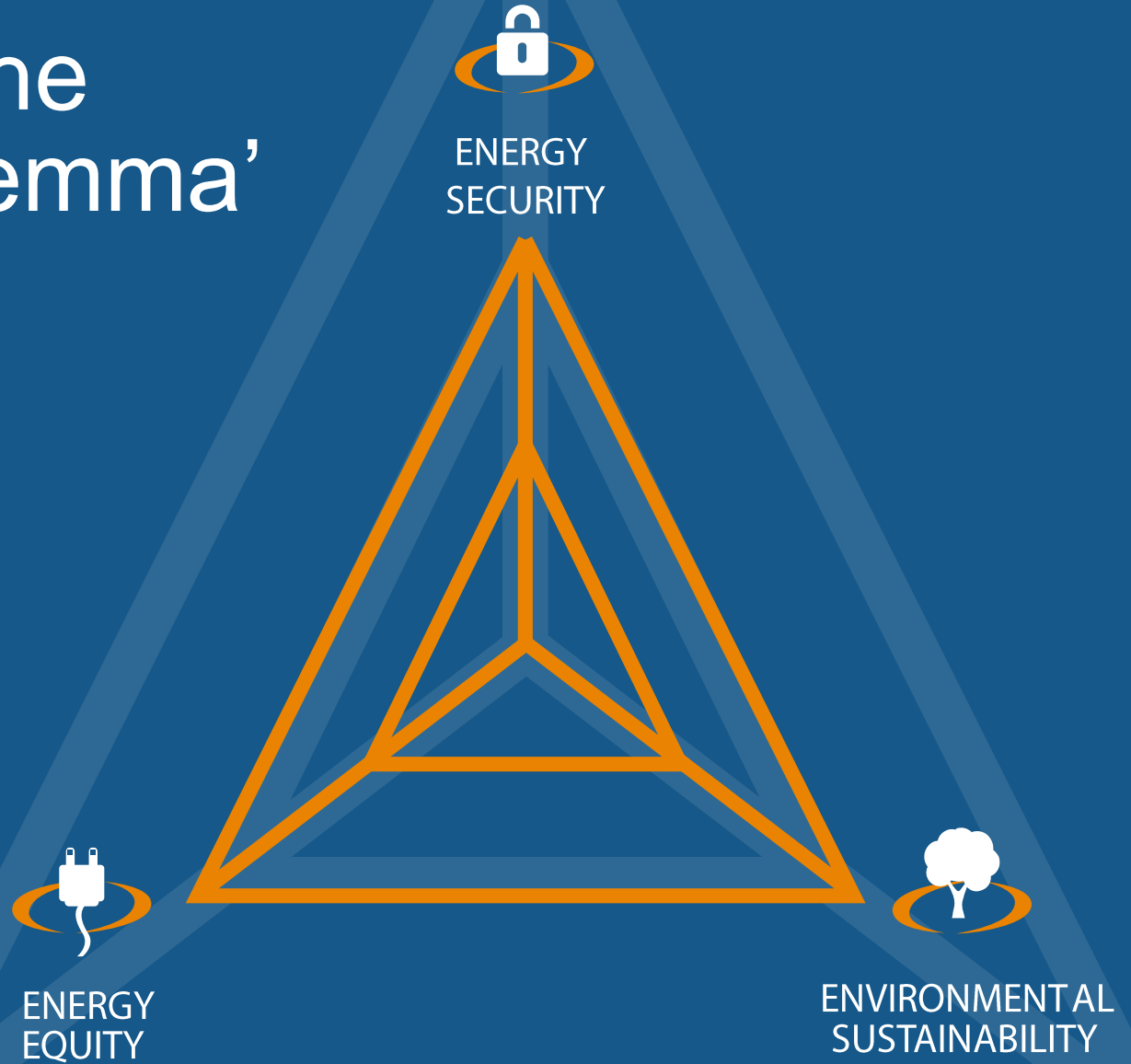
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The World Energy Trilemma



Balancing the 'Energy Trilemma'



Energy Sustainability Index



Performance of EU-28 countries



Northern Countries

- 2 Denmark
- 3 Sweden
- 5 United Kingdom
- 13 Finland
- 20 Ireland
- 42 Lithuania
- 43 Latvia
- 68 Estonia



Eastern Countries

- 22 Slovakia
- 31 Hungary
- 32 Czech Republic
- 48 Poland
- 52 Romania
- 70 Bulgaria



Southern Countries

- 9 Spain
- 23 Portugal
- 25 Slovenia
- 28 Italy
- 30 Croatia
- 39 Greece
- 63 Cyprus
- 71 Malta



Western Countries

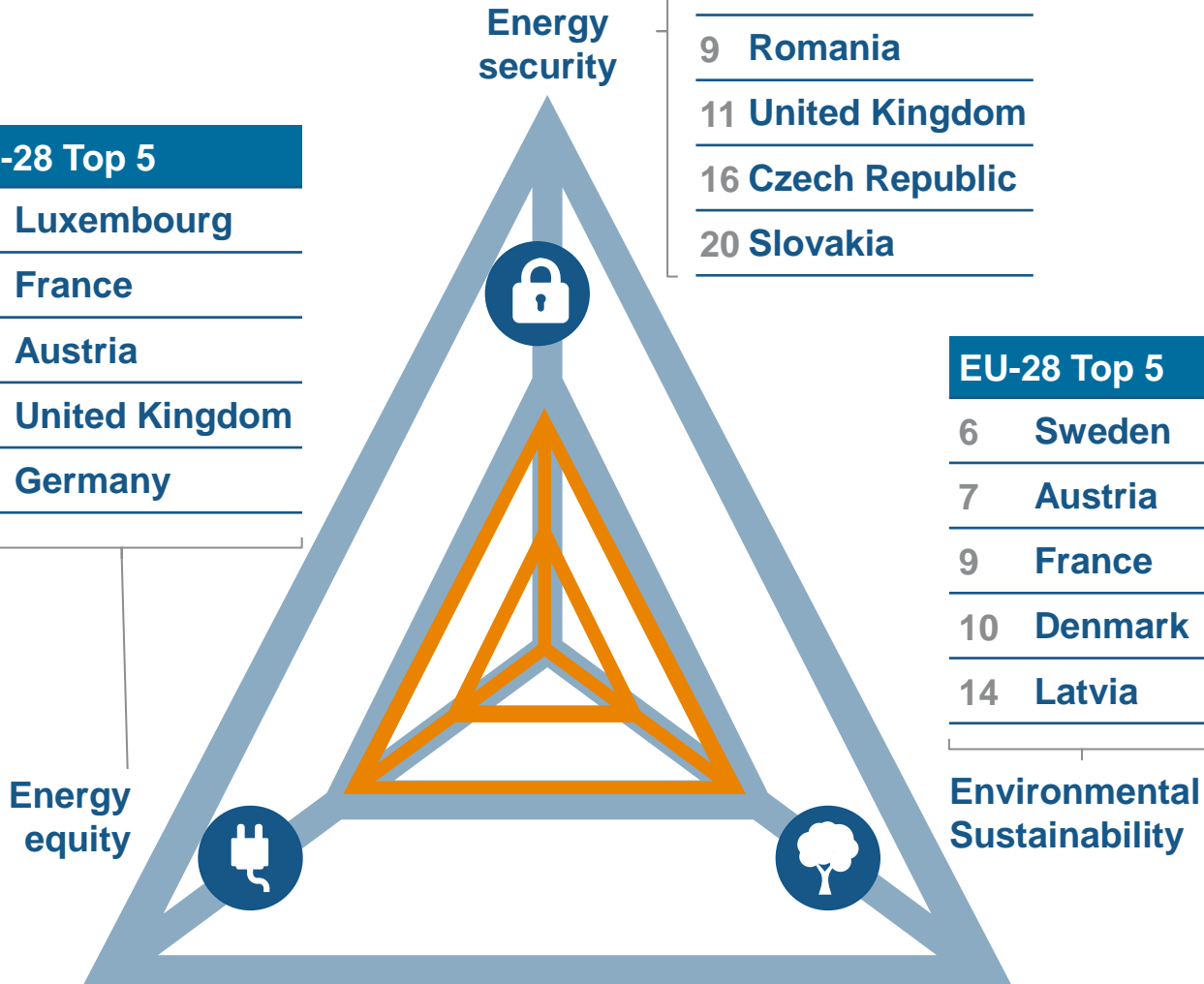
- 4 Austria
- 10 France
- 11 Germany
- 12 Netherlands
- 17 Belgium
- 19 Luxembourg

EU-28 top performers per dimension

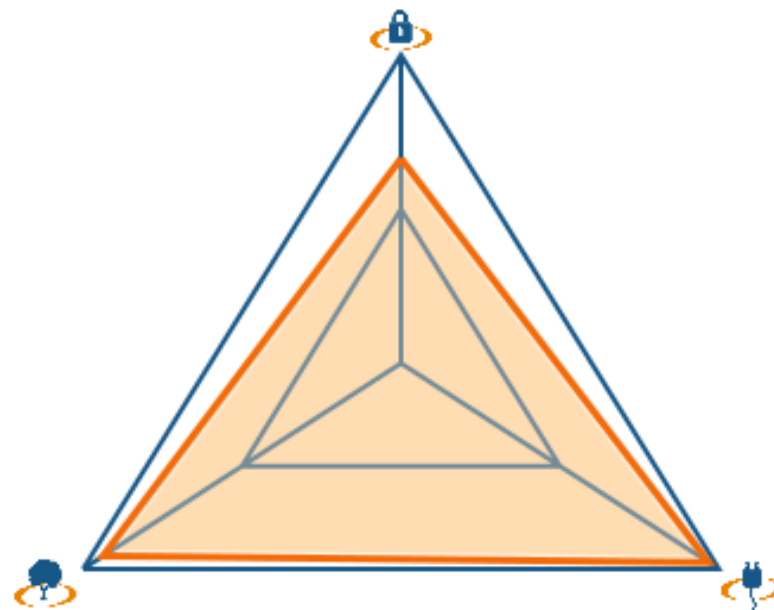
EU-28 Top 5	
4	Luxembourg
5	France
7	Austria
8	United Kingdom
11	Germany

EU-28 Top 5	
3	Denmark
9	Romania
11	United Kingdom
16	Czech Republic
20	Slovakia

EU-28 Top 5	
6	Sweden
7	Austria
9	France
10	Denmark
14	Latvia



France on Rank 10



	2011	2012	2013	Trend	Score
Energy security	40	41	44	↓	B
Energy equity	6	8	5	↑	A
Environmental sustainability	9	9	9	→	A
Overall rank and score	6	5	6	→	AAB

World Energy Trilemma report

Energy Sustainability
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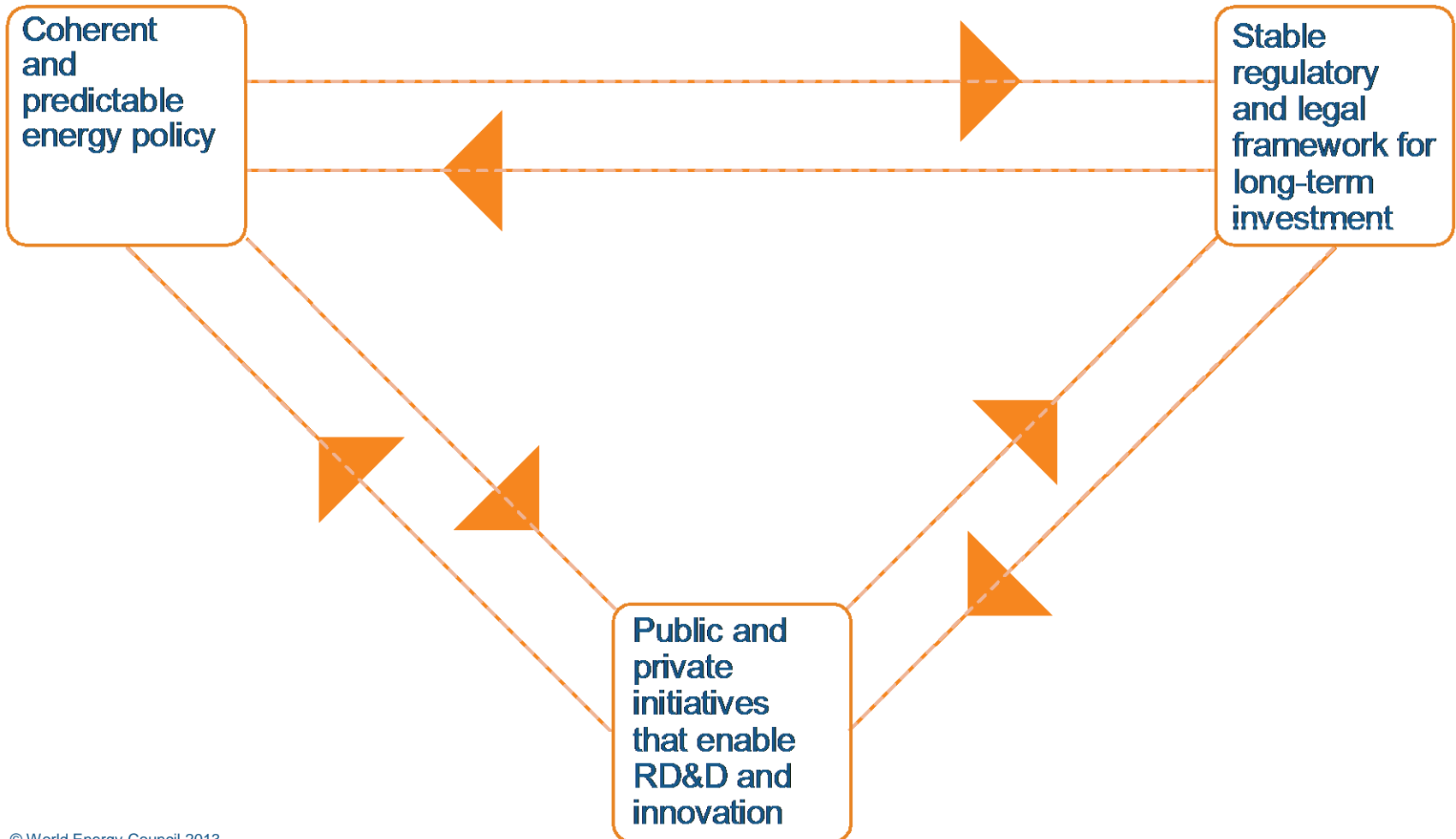
Policy review and
analysis (deep dives)

Call for increased dialogue

- 2012 report views of 40 senior energy executives
- 2013 report response of governments, multilateral organisations and development banks
- 2014 report views of financial sector leaders as a follow up to **Agenda for Change**



Clear vision with a mix of energy sources and technologies



Increasing the engagement with financial community



10-POINT AGENDA FOR CHANGE

The World Energy Council's World Energy Trilemma 2012–2013 research programme captured the insights of more than 100 global energy leaders and led to the identification of a 10-point agenda to address three broad policy areas.



Significant investment is needed in the global energy system over the next 20 years

\$37

USD Trillion

- Cumulative investment of US\$37 trillion is needed in the world's energy supply system until 2035 (New Policies Scenario, IEA 2012)

\$4

USD Trillion

- Cumulative additional investments of US\$ 3.8 trillion to 2035 for efficient end-use technologies (New Policies Scenario, IEA 2012)

\$24

USD Trillion

- To reach the UN's Sustainable Energy for All goals – universal access to modern energy services, doubling global rate of improvement of energy efficiency, and doubling the share of renewable energy in global mix – by 2030 cumulative investment between US\$ 20 and US\$ 24 trillion is needed – a doubling or tripling of current levels

\$26

USD Trillion

- According to WEC's World Energy Scenarios to 2050 it will take between US\$ 19.3 and US\$ 26.7 trillion cumulative global investments in electricity infrastructure alone between now and 2050

Deterrents to Investment

- ▶ Policy/regulatory complexity
- ▶ Lack of consistency
- ▶ Unpredictable or opaque legal frameworks

Competition for Investment

- ▶ Returns must be comparable with non-energy sector options
- ▶ Cost recovery key to sustainability
- ▶ Role of energy pricing frameworks

Global new investment in renewable energy by region 2004-2013, \$BN



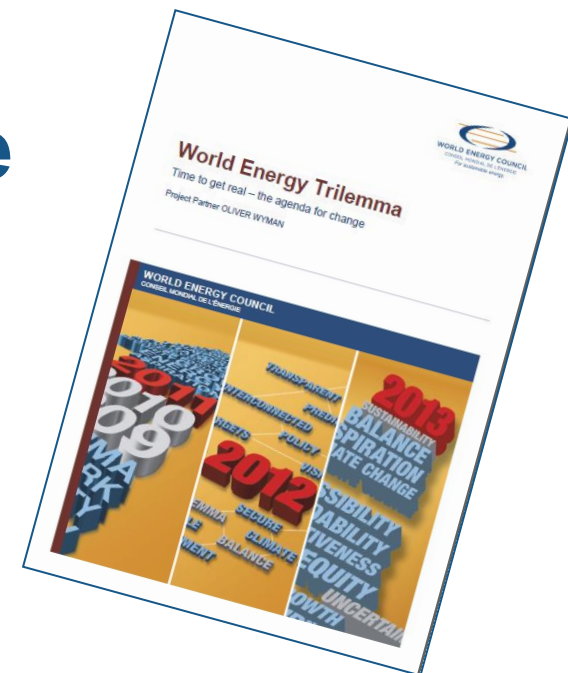
New investment volume adjusts for re-invested equity. Total values include estimates for undisclosed deals.

Source: UNEP, Bloomberg New Energy Finance

What does this mean for Europe?

- ▶ Single versus multiple targets
- ▶ EU versus national policy
- ▶ How to achieve stable/transparent frameworks
- ▶ Climate/energy goals and competitiveness

“Sustainable energy is not only an opportunity to transform societies and grow economies, but also a necessity – a prerequisite to meet growing energy demand and reduce the carbon footprint.”



Thank you

Any questions?

www.worldenergy.org
[@WECouncil](https://twitter.com/WECouncil)