

Time to get real

No solutions only trade offs?



Joan MacNaughton, Executive Chair,
World Energy Trilemma,
BIEE, 17 September 2014



World Energy Trilemma report

Energy Sustainability
Index

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
- Culminating in **Agenda for Change**

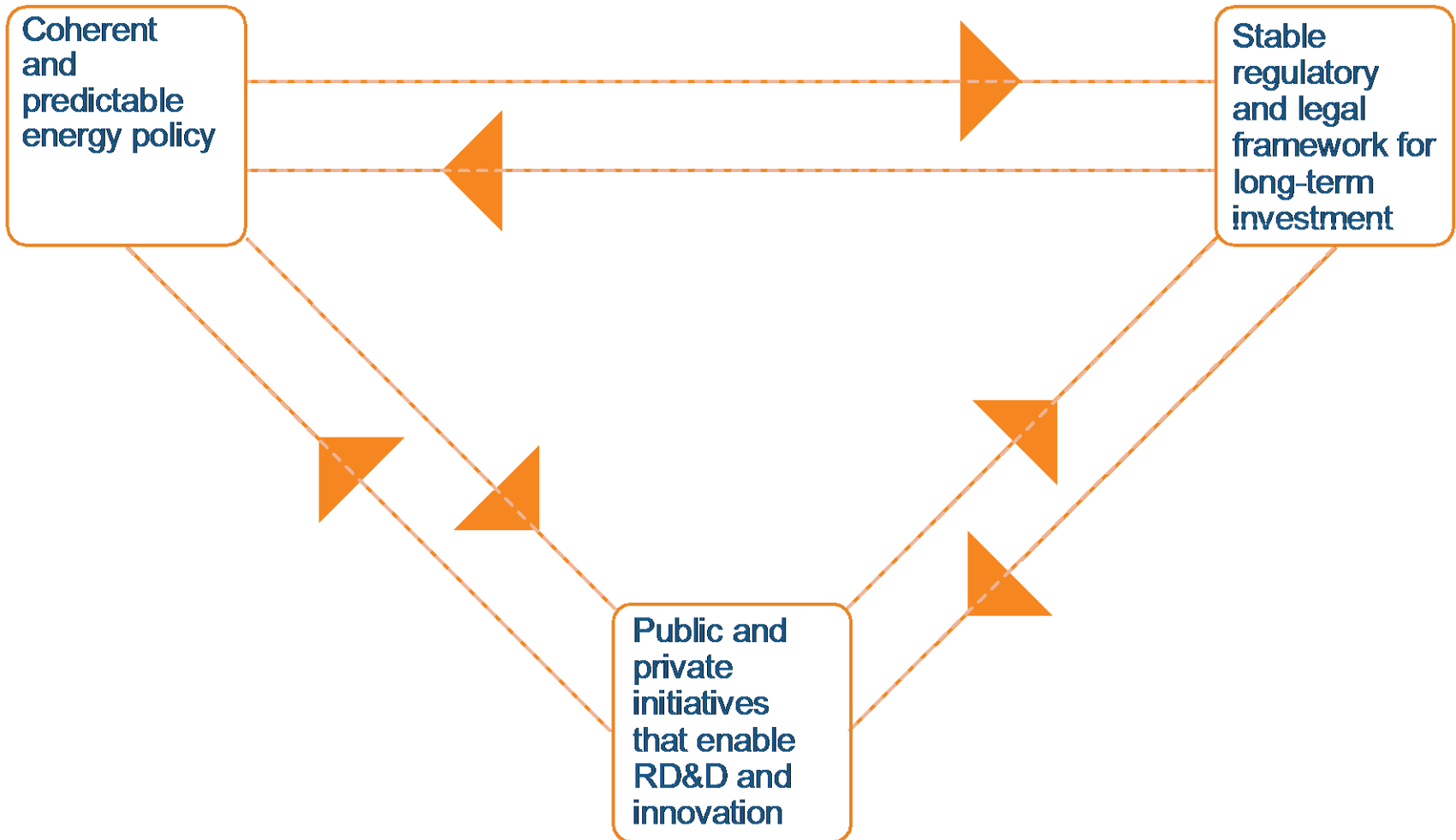


10-POINT AGENDA FOR CHANGE

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.



Clear vision with a mix of energy sources and technologies



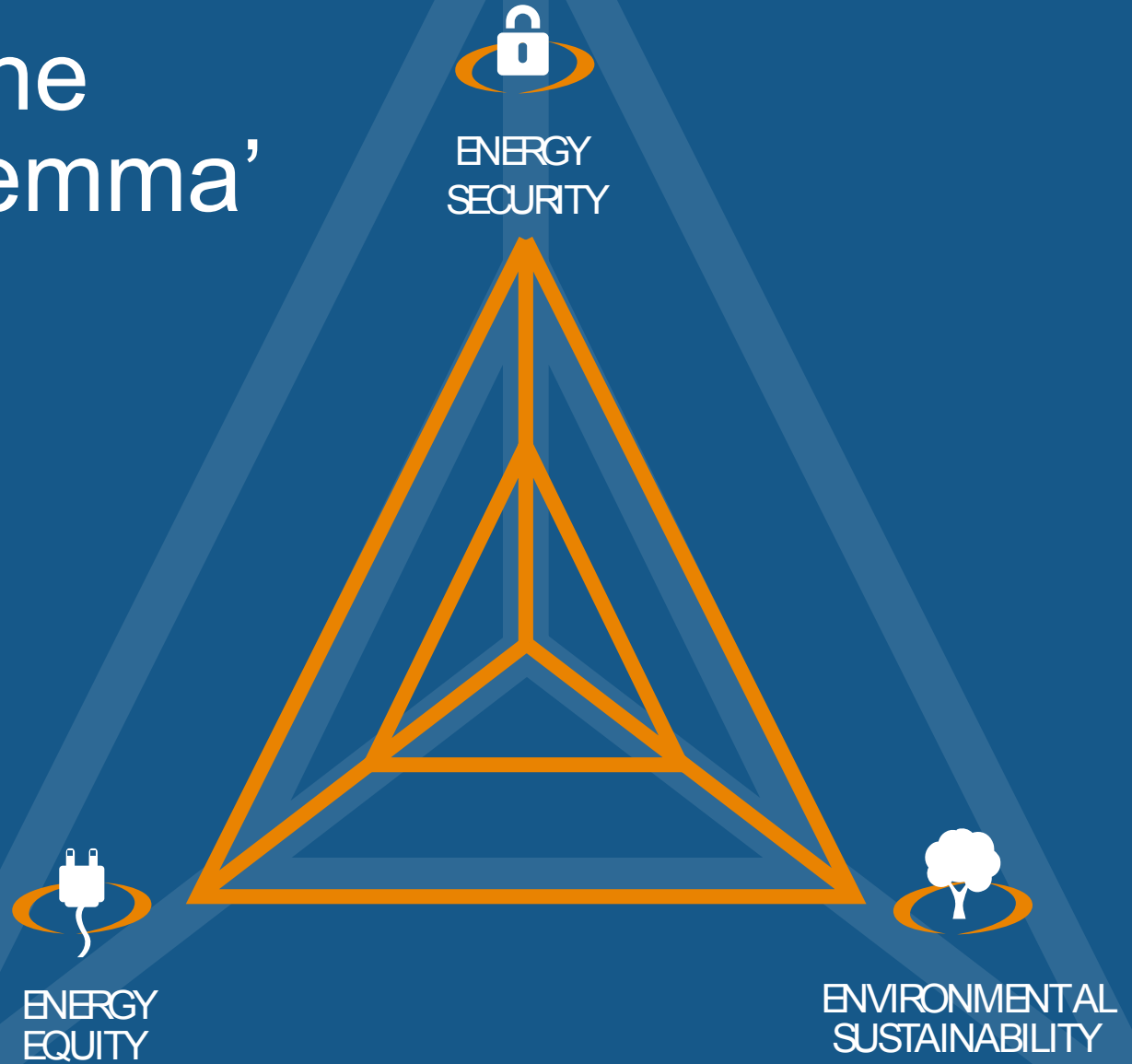
Help from energy industry

1. Greater dialogue, sharing knowledge and experiences
2. Better risk alignment
3. Economic development on a new path to energy sustainability

2014 World Energy Trilemma

- ▶ The role of the financial community in the energy sector.
- ▶ Challenges:
 - Policy/regulatory complexity
 - Lack of consistency
 - Unpredictable or opaque legal frameworks
 - Competition for investment
 - Lack of capacity

Balancing the 'Energy Trilemma'



5 Top Energy sustainability index

- 1 Switzerland
- 2 Denmark
- 3 Sweden
- 4 Austria
- 5 United Kingdom

Top 5 Energy equity

- 1 United States
- 2 Canada
- 3 Australia
- 4 Luxembourg
- 5 France

Top 5 Energy security

- 1 Canada
- 2 Russia
- 3 Denmark
- 4 Bolivia
- 5 Colombia

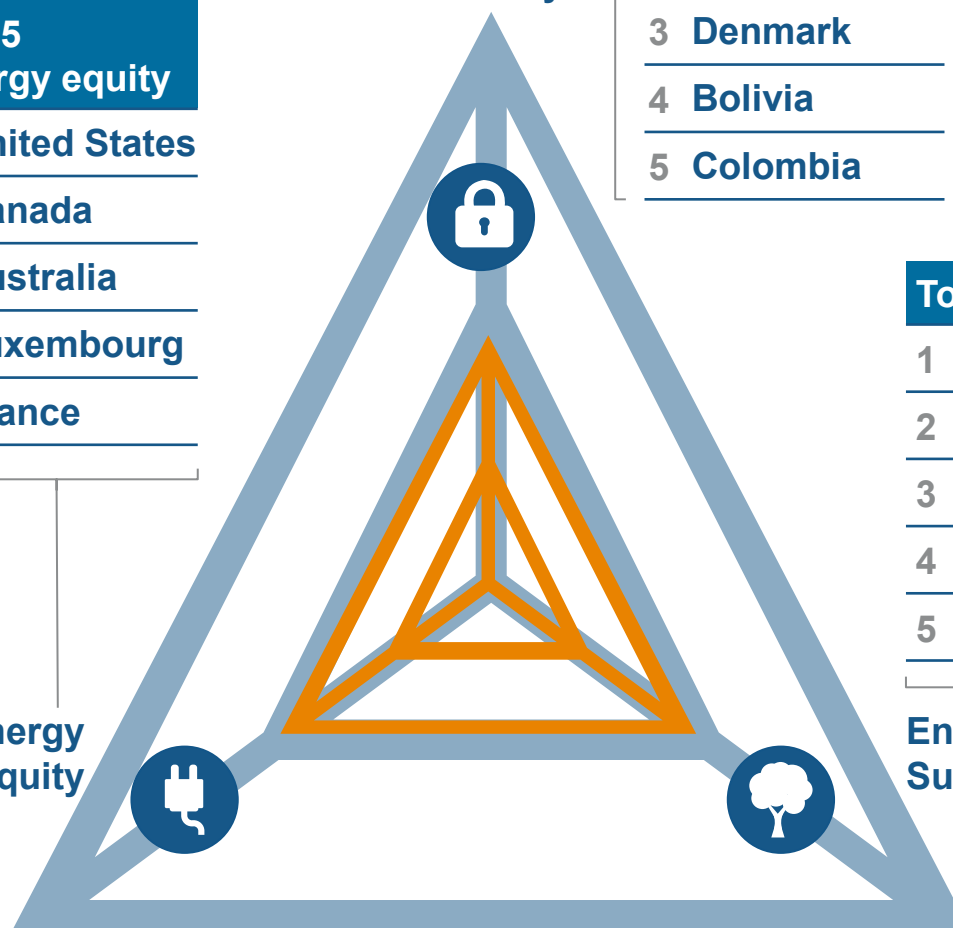
Top 5 Environmental Sustainability

- 1 Switzerland
- 2 Costa Rica
- 3 Albania
- 4 Colombia
- 5 Uruguay

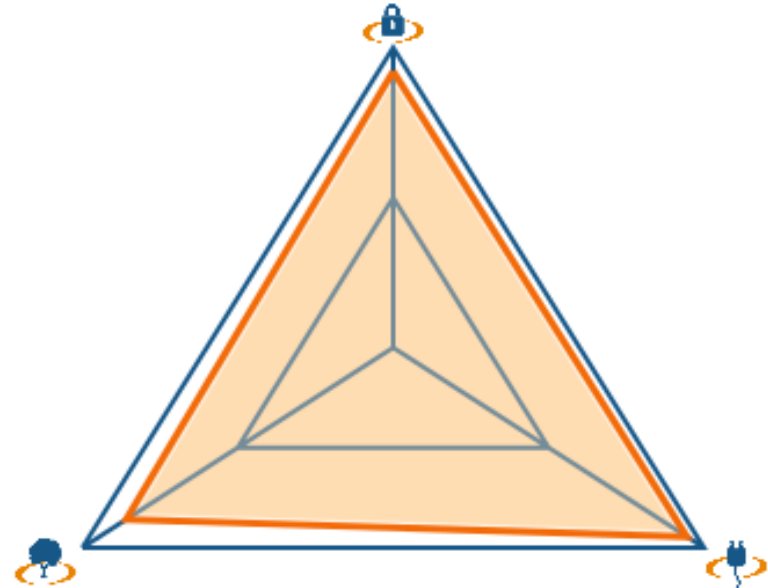
Energy equity

Energy security

Environmental Sustainability



UK on Rank 5



	2011	2012	2013	Trend	Score
Energy security	6	3	11	↓	A
Energy equity	10	5	8	↓	A
Environmental sustainability	21	20	19	↑	A
Overall rank and score	4	2	5	↓	AAA

Performance of EU-28 countries



Northern Countries

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



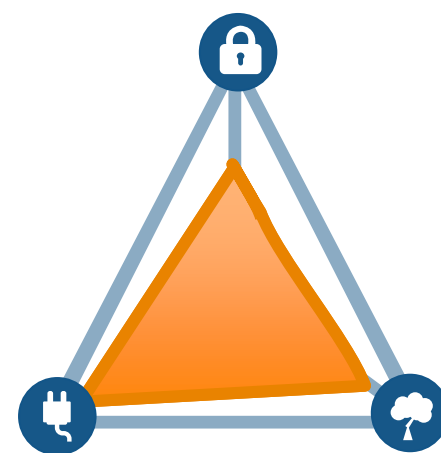
Eastern Countries

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



Southern Countries

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



Western Countries

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

Conclusions

- ▶ Cumulative investment needs to 2035 amount to around \$40 trillion
- ▶ In the EU, \$2 trillion are needed in the power sector alone
- ▶ The UK needs to invest close to £200bn by 2020

Hadn't there better be solutions and not just trade offs?

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