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**ADDRESSING THE CHALLENGE OF
SUSTAINABLE DEVELOPMENT – THE NEED FOR
A GLOBAL RENEWABLE ENERGY TREATY**

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OVERVIEW

- **PART 1: CONTEXT**
 - The climate change challenge
 - The stalling of the climate change negotiations and the SD process
 - The proposal: a global renewable energy treaty
 - Rationale: the psychology of promoting behavioural change
- **PART 2: KEY ISSUES**
 - Environmental law at the cross-roads: 3 key factors
 - The 3 competing elements of energy law and policy
- **PART 3: TOWARDS A GLOBAL RENEWABLE ENERGY TREATY**
 - Technical options (global, regional, national)
 - Current state of international energy law and policy
 - Legal architecture: treaty, soft-law declaration, or other
 - Possible substantive content

CONTEXT

THE CHALLENGE OF CLIMATE CHANGE

- Need to reduce global GHG emissions by 25-40% by 2020 and 80-90% by 2050 (IPCC, 4th Assessment Report, 2008)
- Latest predictions by International Energy Agency indicate a potential for up to 6° C global warming if current energy production and consumption patterns are not altered (IEA, *World Energy Outlook, 2011*)
- Note: most recently, IEA has reported that “gas is not the answer” to GHG reductions
- Additional element of climate change debate is the degree of URGENCY , particularly as to when global emissions should peak so as to avoid ecological tipping points

CONTEXT

STALLING OF THE CLIMATE NEGOTIATIONS AND SD PROCESS

- failure of UNFCCC negotiating process to produce a post-Kyoto regime for effective GHG emissions reductions
- Failure of global treaty system to effectively address challenge of sustainable development (Rio+20 outcomes)

CONTEXT

PROPOSAL: A GLOBAL RENEWABLE ENERGY TREATY

- note current lack of law and policy on energy generally at international level;
- propose idea of possible commitments re both energy efficiency and renewable energy uptake in an international legal instrument
- Leave open option re hard v soft law instrument

RATIONALE: environmental psychology perspective

KEY ISSUES

ENVIRONMENTAL LAW AT THE CROSS-ROADS: 3 KEY FACTORS

- need to “redesign” human society at a fundamental level in relation to energy needs;
- Entrenched resistance from economically powerful vested interests to such change
- Paralysis of international and national governance systems in addressing the redesign challenge (cf., international ENGO's)
- resulting loss of hope and last resort to grass- roots engagement and “bottom-up” strategies

CONCLUSION: need to retain faith in MEA system more generally but seek to use it differently (whilst also promoting bottom-up approaches)

KEY ISSUES

- THE 3 COMPETING ELEMENTS OF ENERGY LAW AND POLICY
 - Energy poverty (cf., right to sustainable energy)
 - Energy security (cf., “transition” gas fuels – CSG, etc.)
 - Decarbonisation / GHG emissions reductions – 4 options
 - Energy efficiency
 - Nuclear
 - Carbon capture & storage
 - Renewable energy

TOWARDS A GLOBAL RENEWABLE ENERGY TREATY

- **TECHNICAL ASPECTS - GLOBAL**

“The global technical potential of concentrating solar power amounts to almost 3,000,000 TWh/y, a number considerably larger than the present world electricity consumption of 18,000 TWh/y. This immense renewable energy resource is mainly concentrated in the deserts of the earth.”

“The distribution of potential areas for CSP worldwide has been mapped with high spatial resolution. It confirms the possibility of applying the concept of solar electricity exports/imports to be applicable to many regions of the world. Solar electricity import corridors from arid desert regions to large centers of demand can help to reduce greenhouse gas emissions and to stabilize electricity costs all over the world.”

Tieb et al, “global Potential of Concentrating Solar Power”,
Institute of Technological Thermodynamics, Stuttgart, Germany,
september 2009

TOWARDS A GLOBAL RENEWABLE ENERGY TREATY

- TECHNICAL ASPECTS – REGIONAL/NATIONAL
- The **European super grid** is a possible future [super grid](#) that would ultimately interconnect the various European countries and the regions around [Europe's](#) borders – including [North Africa](#), [Kazakhstan](#), [Ukraine](#), etc. – with a [high-voltage direct current](#) (HVDC) power grid.
- BEYOND ZERO EMISSIONS REPORT (Australia, 2010)

TOWARDS A GLOBAL RENEWABLE ENERGY TREATY

CURRENT STATE OF INTERNATIONAL ENERGY LAW AND POLICY

“We have a World Health Organisation, two global food agencies, the Bretton Woods financial institutions and organisations to deal with everything from trade to civil aviation and maritime affairs. Energy, the motor of development and economic growth, is a glaring exception. Although it cries out for a holistic, global approach, it is actually dealt with in a fragmented, piecemeal way.”
(M. Elbaradai, *Financial times*, 23 July 2008)

Institutions:

- IEA
- OPEC
- UN agencies
- IAEA
- IRENA

TOWARDS A GLOBAL RENEWABLE ENERGY TREATY

- LEGAL ARCHITECTURE

- treaty

- soft-law declaration

- Global governance strategies (see Gunningham, *“Confronting the challenge of International Energy Governance”*, *Transnational Law*, vol 1;1, 2012, pp 119-135)

TOWARDS A GLOBAL RENEWABLE ENERGY TREATY

- **SUBSTANTIVE CONTENT**
 - declaration of a right to energy
 - Targets (mandatory/voluntary?)
 - Commitments to eliminate fossil fuel subsidies
 - Clean energy finance mechanism
 - Technology transfer
 - Provision for additional regional measures