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Energy and Climate Dialogue

– Some thoughts on transposing the Industrial Emissions Directive and CCS Directive in Ukraine

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AGENDA

- CCS in a legal context
- The ETS Directive
- The CCS Directive
- The Industry Emissions Directive
- Implementation


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CCS In a legal Context

EEA (NOR) REGULATORY FRAMEWORK FOR CCS

EU law

- Directives
  - Directive 2009/31/EC – CCS Directive
  - Directive 2009/29/EC – ETS Directive
  - Directive 2004/35/EC – Environmental Liability Directive
  - Directive 2010/75/EU - Industrial Emissions Directive

International law

- Conventions and protocols
  - London Convention, 1972
  - 1996 Protocol to the London Convention
  - Convention on the Protection of the Black Sea Against Pollution
  - United Nations Convention on the Law of the Sea (UNCLOS)
  - United Nations Convention on Climate Change (UNFCCC)
  - Kyoto Protocol

Norwegian laws and regulations

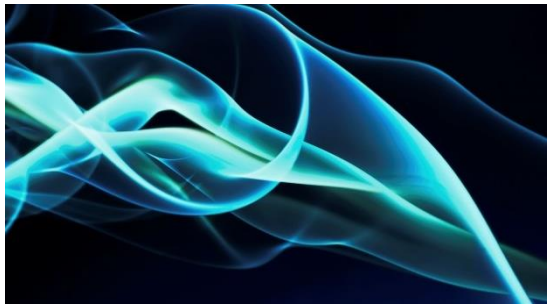
- Laws
  - The Continental Shelf Act
  - The Petroleum Act
  - The Pollution Control Act
  - Greenhouse Gas Emission Trading Act
  - Act relating to CO_2 tax in the petroleum activity on the continental shelf
  - The Administration Act
  - The Planning and Building Application Act
- Regulations
  - Regulations for transport and storage of CO_2
  - The Petroleum regulations
  - The Pollution Control Regulations
  - The Greenhouse Gas Emission Trading Regulations
  - The Environmental Impact Assessment Regulations
  - The Planning and Building Application Regulations
  - The Framework Regulations
  - The Management Regulations
  - The Technical and Operational Regulations
  - The Activities Regulations
  - The Facilities Regulations

The ETS Directive

APPLICABILITY

- Applies to emissions in EU and EEA

- Subject matter
  - establishes a scheme for greenhouse emissions allowance trading
  - provides for the reductions of emissions to avoid dangerous climate change
  - lays down provisions for assessing and implementing a stricter Community reduction commitment



CONTENTS AND PRINCIPLES

- “Cap and trade” system
- Not all industry is included
- Permits
- Allocation
- Monitoring and reporting
- Sanctions
- Transparency and access to information
- CDM

PROPOSED AND FORESEEN CHANGES

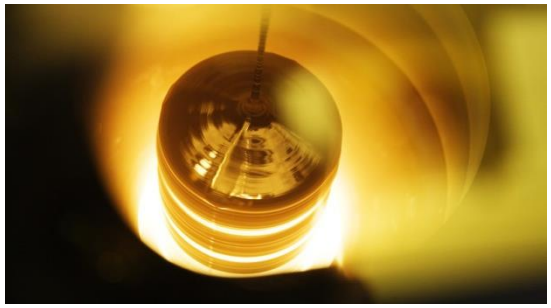
- Reform process: Market stability reserve (MSR)
- Changes in legislation
- Changes to allow industry to benefit from carbon leakage mitigating measures and free allocation of emission allowances beyond 2020
- Changes to create legal basis for establishing an innovation fund and a modernisation fund

The CCS Directive

APPLICABILITY

- Applicable to geological storage of CO2 in the territory of the Member States, their exclusive economic zones and on their continental shelf

- A legal framework for the environmentally safe geological storage of CO2



- The purpose is permanent containment to prevent and eliminate negative effects and risk to the environment and human health

- EOR

CONTENTS AND PRINCIPLES

- Sovereignty
- Permit Regime
- Trans-boundary Transportation
- Third-Party Access
- Long-Term Liability
- Transfer of Liability

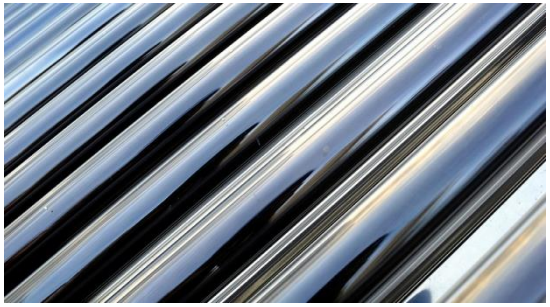
Industrial Emissions Directive

APPLICABILITY

- Applicable to industrial activities giving raise to pollution

- Research activities, development activities and testing of new products and processes excluded

- Integrated approach to prevention and control of emissions



CONTENTS AND PRINCIPLES

- Obligation to hold permits

- Article 36: Carbon capture readiness
  - For plants licenced after entry into force of CCS Directive

- Article 38: monitoring of air polluting substances

ARTICLES 36 AND 38

Article 36 **Geological storage of carbon dioxide**

1. Member States shall ensure that operators of all combustion plants with a rated electrical output of 300 megawatts or more for which the original construction licence or, in the absence of such a procedure, the original operating licence is granted after the entry into force of Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide(1)
OJ L 140, 5.6.2009, p. 114., have assessed whether the following conditions are met:

(a) suitable storage sites are available,
(b) transport facilities are technically and economically feasible,
(c) it is technically and economically feasible to retrofit for carbon dioxide capture.

2. If the conditions laid down in paragraph 1 are met, the competent authority shall ensure that suitable space on the installation site for the equipment necessary to capture and compress carbon dioxide is set aside. The competent authority shall determine whether the conditions are met on the basis of the assessment referred to in paragraph 1 and other available information, particularly concerning the protection of the environment and human health.

Article 38 **Monitoring of emissions into air**

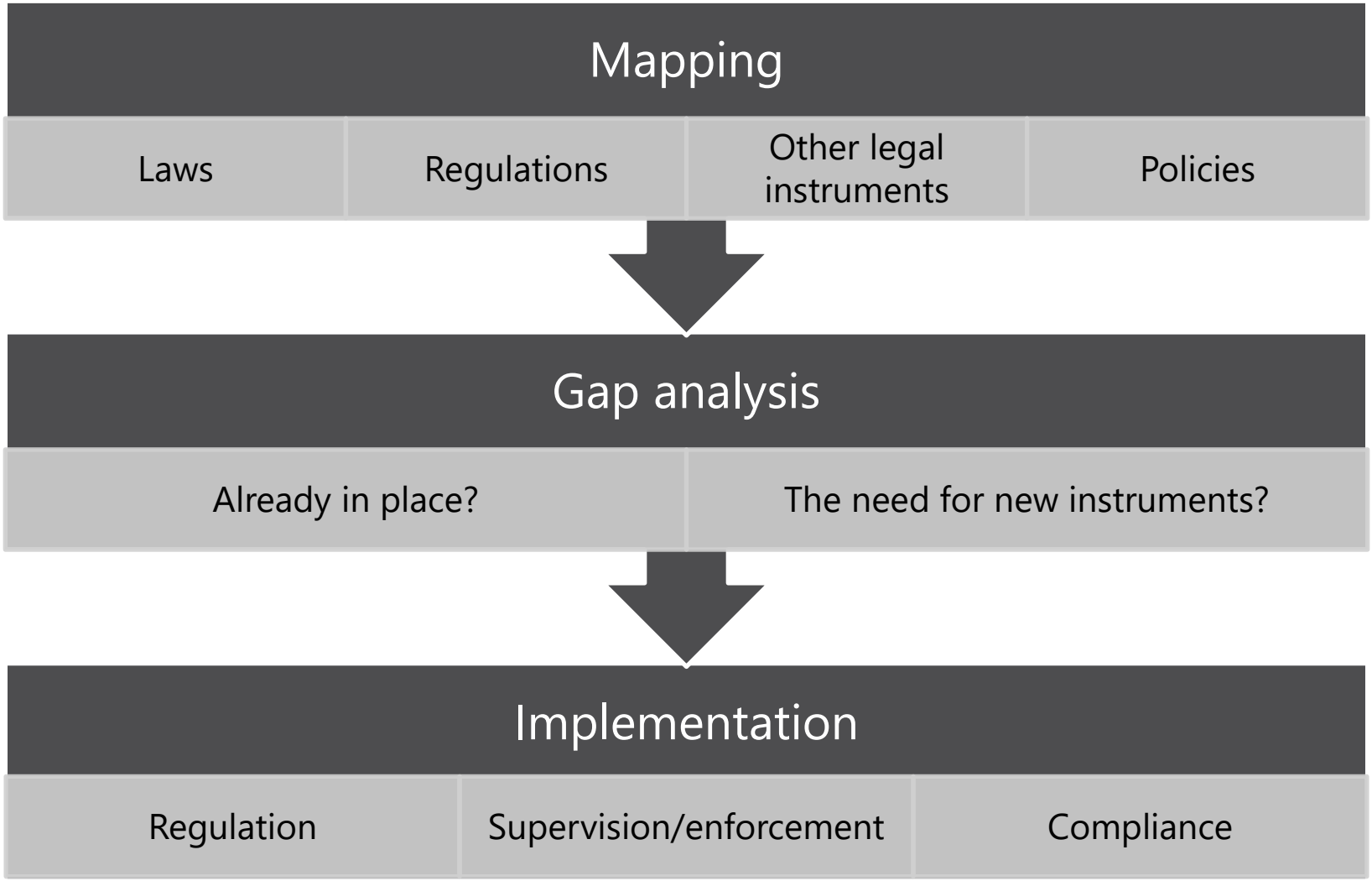
1. Member States shall ensure that the monitoring of air polluting substances is carried out in accordance with Part 3 of Annex V.
2. The installation and functioning of the automated monitoring equipment shall be subject to control and to annual surveillance tests as set out in Part 3 of Annex V.
3. The competent authority shall determine the location of the sampling or measurement points to be used for the monitoring of emissions.
4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

Ukraine

SOME ASSUMPTIONS

- Adopting to the regulatory framework for CO2 in EU, due to co-operation in the field of energy between Ukraine and the European Union; Energy Union
- Large emissions from fossil fuels and other industry
- Dependent on CCS to reduce emissions significantly for industry critical to Ukrainian economy
- A well-developed transport network (pipelines)
- Potential oil and gas reservoirs both onshore and offshore
- Licenses petroleum activities through PSAs
- Regulatory authority divided between the Republic and state provinces, with Crimea with a separate parliament
- Interfaces between the Ministry of Energy and Environment and the Ministry of Energy and Coal as competent authority on low-carbon policies and regulation

IMPLEMENTING THE DIRECTIVES



EXISTING FRAMEWORK?

- The Ukraine Constitution
- The Energy Union
  - Memorandum of Understanding
- Law of Ukraine on Oil and Gas
- Law of Ukraine on the Principles of the Natural Gas Market Operation
- Natural Resources Code of Ukraine
- Law of Ukraine on the Pipeline Transport
- Law of Ukraine on Natural Monopolies
- Law of Ukraine on Licensing Certain Types of Business Activity
- [Draft] law on State Regulation in the Energy Sector
- Law of Ukraine On Electric Power Industry
- Mining law of Ukraine
- Law of Ukraine on Coalbed Methane
- Law of Ukraine on Heat Supply
- Law of Ukraine on Energy Conservation
- Law of Ukraine on Combined Production of Heat and Electric Energy and Use of Waste Energy Potential
- Law of Ukraine on Alternative Energy Sources
- Law of Ukraine on Alternative Types of Fuel
- Law of Ukraine on Introduction of Changes to Certain Laws of Ukraine as to establishment of “green” tariff
- Law of Ukraine on Use of Nuclear Power and Radiation Safety

TO CONSIDER – AS PART OF THE GAP ANALYSIS

- The level of implementation
  - "As is"
  - General principles
  - The need for national adjustments

- New law or regulation vs. amendments to existing framework

- The use of standards through regulations or guidelines
  - On-going standardisation ISO TC 265
  - When the responsible party makes use of a standard recommended in the guidelines to a provision of the regulations, as a means of complying with the requirements of the regulations in the area of health, safety and the environment, the responsible party can normally assume that the regulatory requirements have been met, c.f. the Norwegian Framework Regulation Section 24 first paragraph

TO CONSIDER – AS PART OF THE REGULATION

- Competent authority
  - Already existing?
  - Establish new entity;
    - independent, or
    - part of existing entity?

- Permit regime
  - Already existing regime sufficient?
  - In combination with a licensing regime?

- Long-term liability and financial mechanisms
  - What is acceptable?
  - What is practical?

TO CONSIDER – AS PART OF THE REGULATION

- Regulatory framework for capture, transport and storage, and interfaces

- Capture
  - Not covered by the CCS Directive
  - Already regulated?

- Transportation
  - Pipelines, ships and/or trucks
  - Third party access

- Storage
  - Onshore and/or offshore
  - Potential for EOR?

THANK YOU!

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Support slides, extras

PERMIT REGIME

- International law
  - London Convention Articles IV (1)(b), VI
  - London Protocol Articles 6 (2) (Dumping), 7 (2) (Internal Waters), 9 (Issuance)

- EU law; CCS Directive
  - Articles 5 (Exploration Permits), and 6 etc. (Storage Permits)

EOR COMBINED WITH STORAGE OF CO2

- International law
  - No direct law or regulation regarding EOR

- EU law; CCS Directive
  - *«EHR is not in itself included in the scope of this Directive. However, EHR is combined with geological storage of CO_2, the provisions of this Directive for the environmentally safe storage of CO_2 should apply»,* c.f. Preamble (20).

TRANS-BOUNDARY TRANSPORTATION

- *"Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea,"* cf. London Protocol Article 6
  - Amendment LP4 adopted in 2009 and 2013, opening up for trans-boundary transportation

- *"When pollution originating from a Contracting Party is likely to prejudice the interests of one or more of the other Contracting Parties to the Convention, the Contracting Parties concerned shall enter into consultation, at the request of any one of them, with a view to negotiating a cooperation agreement"*, cf. OSPAR Article 21

- CCS Directive and national legal framework subordinate to the protocol
  - CCS Directive Art. 24
  - The Continental Shelf Act Section 2

THIRD-PARTY ACCESS TO INFRASTRUCTURE

- International law:
  - No direct law or regulation regarding third party access

- EU law
  - Article 21; Ensure access for potential users to transport networks and to storage sites
    - Transparent and non-discriminatory
    - Fair and open access

LONG TERM LIABILITY

Not solved directly in International Law, however:

- *"[...] the Contracting Parties undertake to develop procedures regarding liability arising from the dumping or incineration at sea of wastes or other matter",* cf. LP Article 15.
- Precautionary principle, **polluter pays** and best available techniques, cf. LP Article 3 and OSPAR Article 2

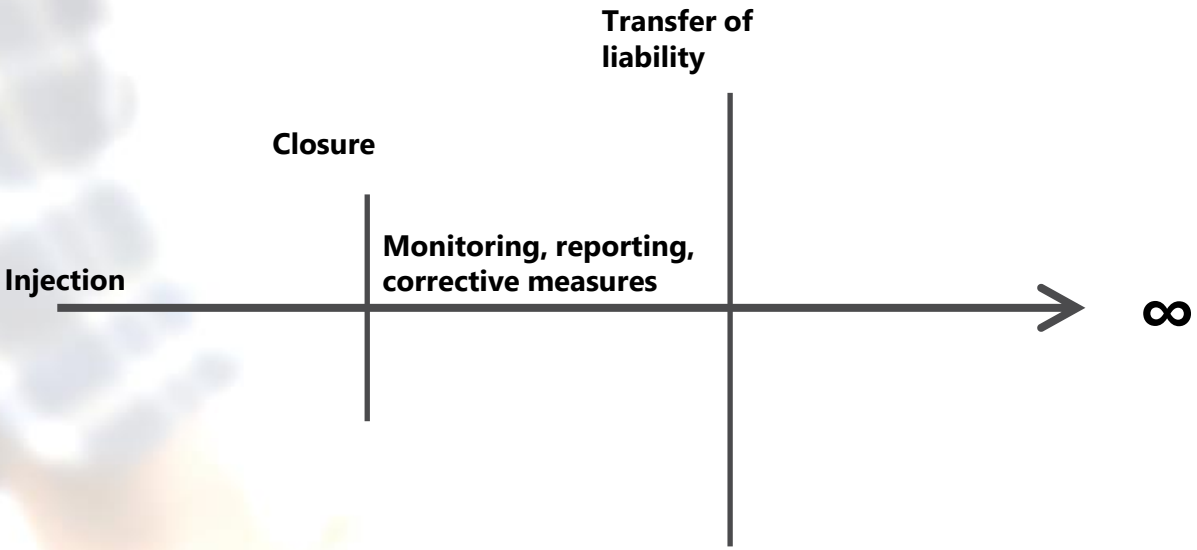
EU LAW – CCS DIRECTIVE

- Closure and post-closure obligations, cf. Article 17
  - monitoring, reporting and corrective measures
  - surrender of allowances
  - preventive and remedial actions
  - sealing storage site and removing injection facilities
  - post-closure measures and cost incurred

- Financial security, cf. Article 19, cf. Article 9
  - financial security or other equivalent
  - ensure fulfilment of obligations arising under the permit
  - periodically adjustments in accordance with risk

- EU ETS

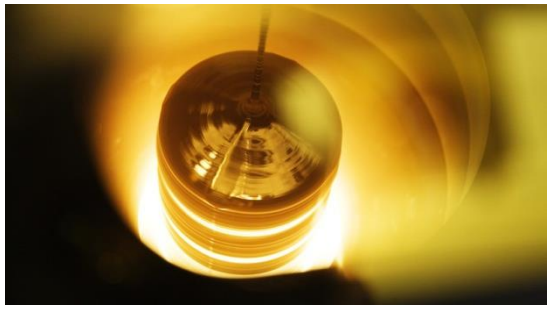
Transfer of liability

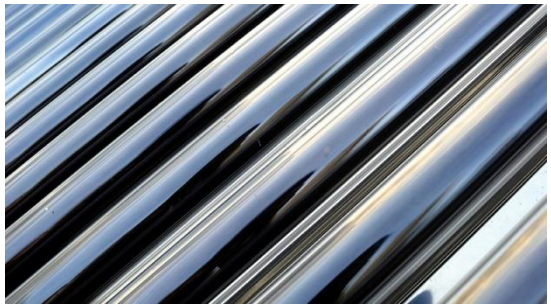


TRANSFER OF LIABILITY

- International law;
  - No direct law or regulation regarding transfer of liability

- EU law; CCS Directive
  - Article 18 - Transfer to competent authority
    - *"[i]f and when all available evidence indicates that the stored CO_2 will be completely and permanently contained",*
    - after a minimum period of 20 years,
    - if the financial obligations have been fulfilled
    - if the site has been sealed and injection facilities are removed
  - Article 20 - Financial mechanism
    - financial contributions available before transfer
    - possible guidelines adopted by the Commission






EU Law

REGULATIONS AND DIRECTIVES

- Regulations
  - Binding upon and directly applicable within all Member States
  - Enters into force on the date specified in the particular regulation, or on the twentieth date following publication in the Office Journal

- Directives
  - Binding upon whom it is addressed to
  - Discretion is left to Member States as to how the directive is to be implemented both in form and method
  - Must be implemented within the date specified in the particular directive, or on the twentieth date following publication in the Office Journal

IMPLEMENTATION OF DIRECTIVES

- EU Member States

EU directive adopted and passed into EU law

National readings and enactments of law meeting the standards set out in the directive

Timeframe given to implement the directive at national level

- EFTA States

EU directive adopted and passed into EU law

Decision of the EEA joint committee to adopt a EU directive

National readings and enactments of law meeting the standards set out in the directive

IMPLEMENTATIONS OF DIRECTIVES

- Implementing and enforcing EU directives:
  - The involvement of affected parties during the readings
    - undermining national democratic processes?
  - The significance of preparatory work
    - EU preparatory work
    - National preparatory work
  - Divergent rules of interpretation
  - The element of supra-nationality

ARNTZEN DE BESCHE LAW FIRM

- BANKING AND FINANCING LAW
- CONTRACT AND CONSTRUCTION LAW
- CORPORATE LAW
- CORPORATE M&A LAW
- DISPUTE RESOLUTION AND LITIGATION
- EMPLOYMENT LAW
- EUROPEAN AND COMPETITION LAW
- INSURANCE AND PENSION LAW
- INTELLECTUAL PROPERTY LAW
- PETROLEUM LAW
- RENEWABLE ENERGY AND CLIMATE LAW
- RESTRUCTURING AND INSOLVENCY LAW
- STOCK EXCHANGE AND SECURITIES LAW
- TAX LAW

REFERENCE PROJECTS CCS AND ETS

- **BASREC CCS Expert Network (ongoing):** Contributing to the planning and designing a CO_2 transport solution as part of a study for full scale deployment of CCS in the Baltic Sea Region
- **ISO/TC 265 project for standardisation of CCS activities (ongoing):** Part of the Norwegian Mirror Committee and appointed as a national expert in Working Group 6 (EOR)
- **NORDIC CCS Summer School:** Teaching
- **Pre-feasibility study on potential full-scale CCS projects in Norway 2015:** Mapping and analysing the legal framework for CCS, both nationally and internationally, as well as providing support to elucidating potential business models
- **GCCSI Legal and Regulatory Indicator 2015:** Sub-contractor regarding assessment of the national legal framework for CCS in Norway
- **Carbon Capture Mongstad (2009-2013):** An integrated part of the project organisation, as e.g inhouse procurement manager and legal advisors. Also part of the negotiation team, representing Gassnova, negotiating commercial agreements necessary for deployment of a full-scale CCS project at Mongstad in Norway.
- **Norwegian CCS Study (2012):** Mapping of the applicable law, permit issues and liability regime in Norway for CCS on behalf of Gassnova.
- **CO_2 Technology Mongstad (TCM) (2007-ongoing):** Legal advisors, partly integrated in the organisation, mapping regulatory framework, negotiating contracts, contributing to business development etc.
- **Gassnova (2006-ongoing):** A part of a core team advising Gassnova on matters relating to e.g. procurement, public administrative law, constitutional law, environmental law and contract
- **Ministry of Petroleum and Energy (Norway):** Implementing national CCS policy and goals, including negotiating with industrial stakeholders and establishing Gassnova SF
- **Climate Law:** Numerous public administration complaints and discussions with ESA and Norwegian authorities

SOME OTHER REFERENCE PROJECTS

- Drafting and revising Draft Regulations and the Model PSC under Timor-Leste Economic Area 2012-2013, 2015

- Tanzania Model PSA revision ahead of 4th Deep Offshore Round 2013/14
- South Sudan Petroleum legislation and regulatory set-up 2011 -2013

- Redesigned Cyprus Energy Plan following the financial crisis, to comply with EU and lenders' requirements, 2013

- Sudan – South Sudan negotiation facilitation, drafted the key AUHIP Oil Agreement that was signed 27 September 2012

- Advised Govt of Ghana on
  - Petroleum Commission Act, 2012
  - Petroleum Bill not yet tabled in Parliament
  - Gas Task Force
  - Petroleum Regulatory regime and implementing regulations and guidelines
  - Production Sharing Agreement

HOW WE WORK FOR FOREIGN GOVERNMENTS

- With our broad international experience we are able to:
  - Advise on/provide analysis of domestic law based on comparative studies, and
  - Provide advice on implementation based on best international practice.

- Our strength stems from Norwegian and international experience, but our advice is tailor-made to meet our clients' needs in their domestic context

- In every project for a foreign government it is therefore essential for us to
  - Establish close contact with the client to identify their needs and challenges
  - "Translate" best international practise into solutions for the domestic context to ensure relevance, efficiency and sustainability
  - Collaborate with other local experts, in particular local lawyers, where possible

HOW WE WORK FOR FOREIGN GOVERNMENTS

- Our background enables us to address the Government party in their own vernacular:
  - We will regularly know
    - as much about their rule book, and
    - more about the background for their rules, than they do themselves.
  - We can explain
    - the effect of a given initiative in terms they should understand
    - why personal «rent-seeking» (bribes) is not a good policy for them, their government or their country (we have also set up the international EITI secretariat and advice it on policy issues)

- We recognise the value of - and aim at creating for the client:
  - long-term relationships with the applicable government
  - a secure position in the host country; w.r.t. contacts with civil society, local authorities and groups

- A sounding board when considering investments into new jurisdictions

WHAT WE DO FOR FOREIGN PETROLEUM AUTHORITIES

- In practical terms, our advice to governments include:
  - Strategic brainstorming with key policy makers
  - Development and drafting of energy and petroleum policy documents
  - Development and drafting of legislation and key contract documents
  - Sounding board on fiscal and revenue issues
  - Institutional roles and responsibility

  - Regulatory support, assistance for drafting regulations
  - Various supporting roles
    - Bid rounds,
    - Contract negotiation,
    - Day-to-day resource management

  - Legal training and capacity building exercises
  - Planning and conducting workshops, seminars and training sessions
  - Designing and planning regulatory compliance programmes

SOME OF OUR PEOPLE

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