REGIONAL ENERGY COOPERATION IN NORTHEAST ASIA: GLOBAL TRENDS, THE IMPORTANCE OF RUSSIAN NATURAL GAS AND THE ROLE OF THE ENERGY CHARTER

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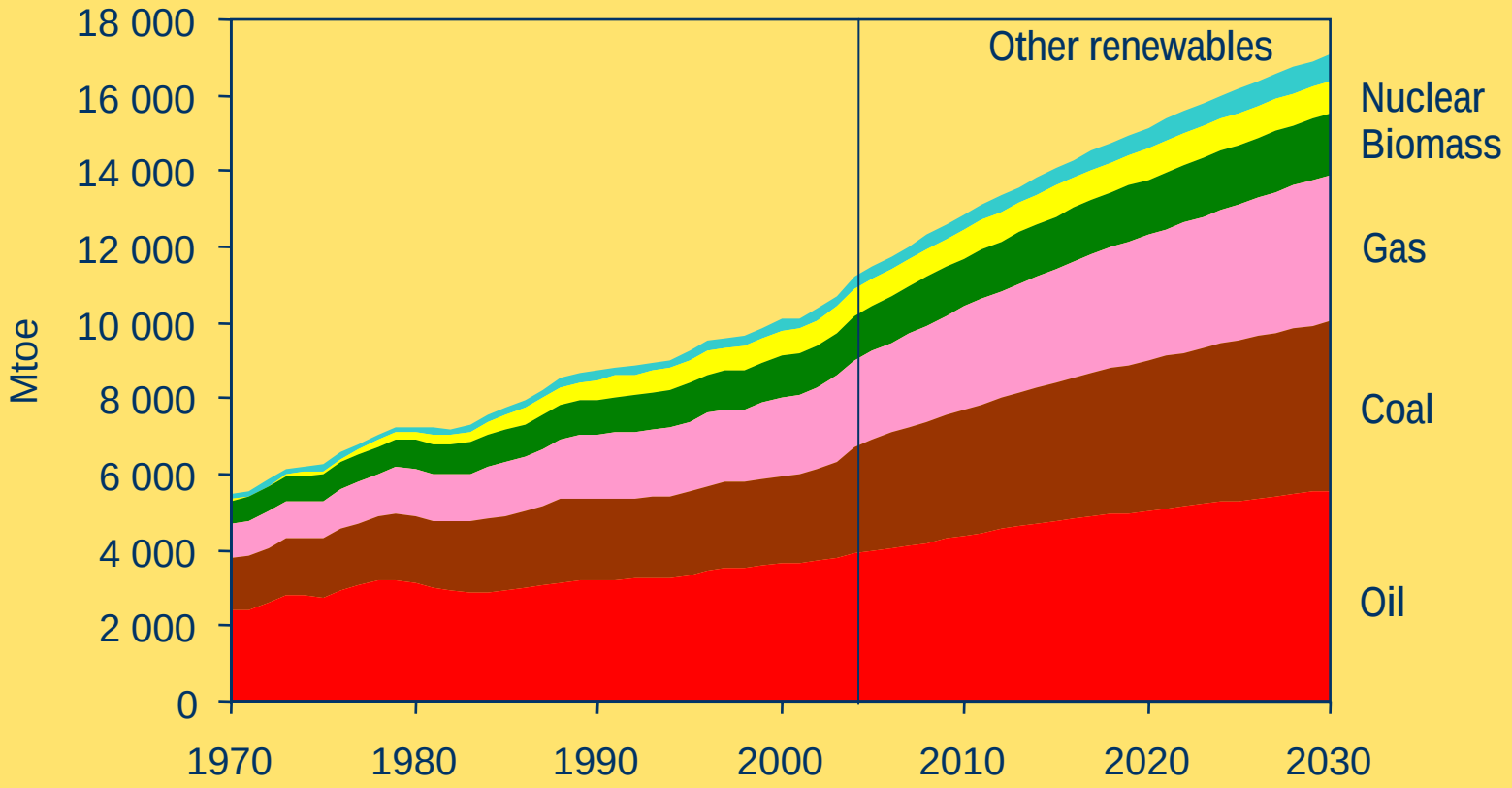
Deputy Secretary General
Energy Charter Secretariat

Key-note speech at the "10th International Conference on Northeast Asian Natural Gas and Pipeline: Multilateral Cooperation"

18-19 September 2007, Novosibirsk, Russia

World Energy Outlook 2006

Reference Scenario: World Primary Energy Demand



Global demand grows by more than half over the next quarter of a century, with coal use rising most in absolute terms

Figure 1

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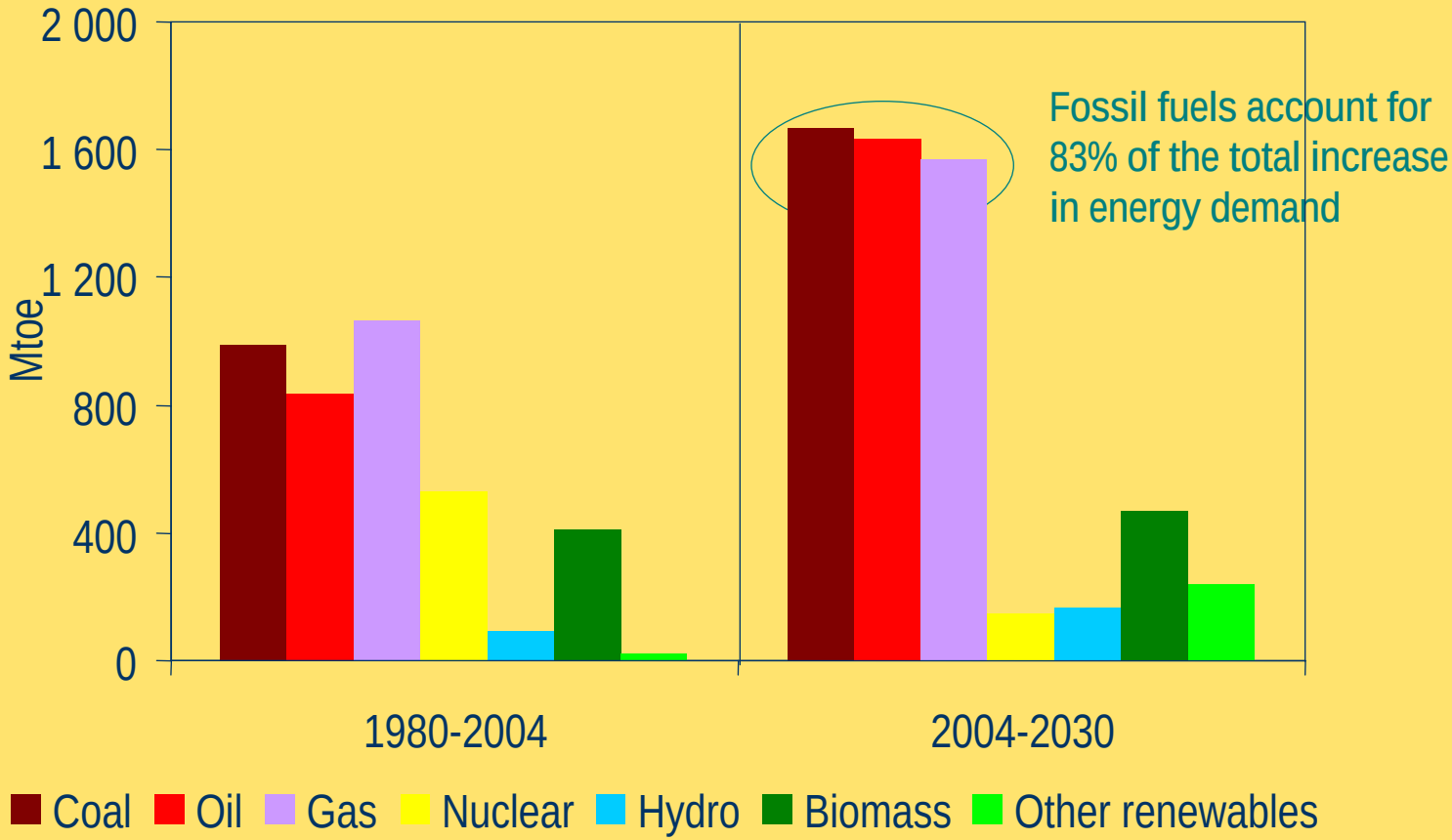
World Energy Outlook 2006

Reference Scenario:
Incremental World Primary Energy Demand



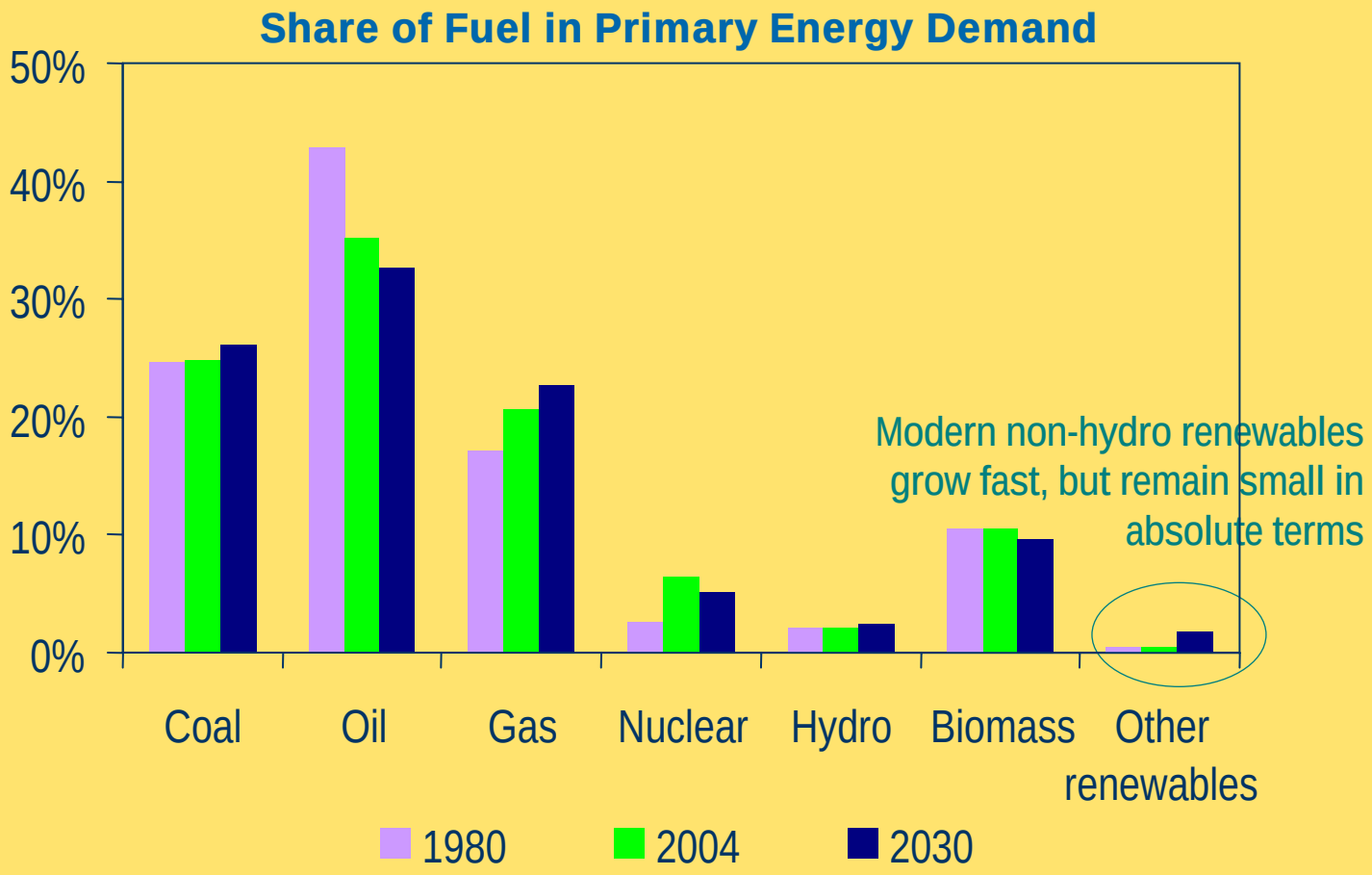
Fossil fuels account for most of the increase in global energy demand between now & 2030, though non-hydro renewables grows fastest

Figure 2

© OECD/IEA - 2006

World Energy Outlook 2006

Reference Scenario:
World Primary Energy Demand by Fuel



Oil remains the most important fuel, but its share in the global energy mix drops while those of gas, coal & modern renewables rise

Figure 3

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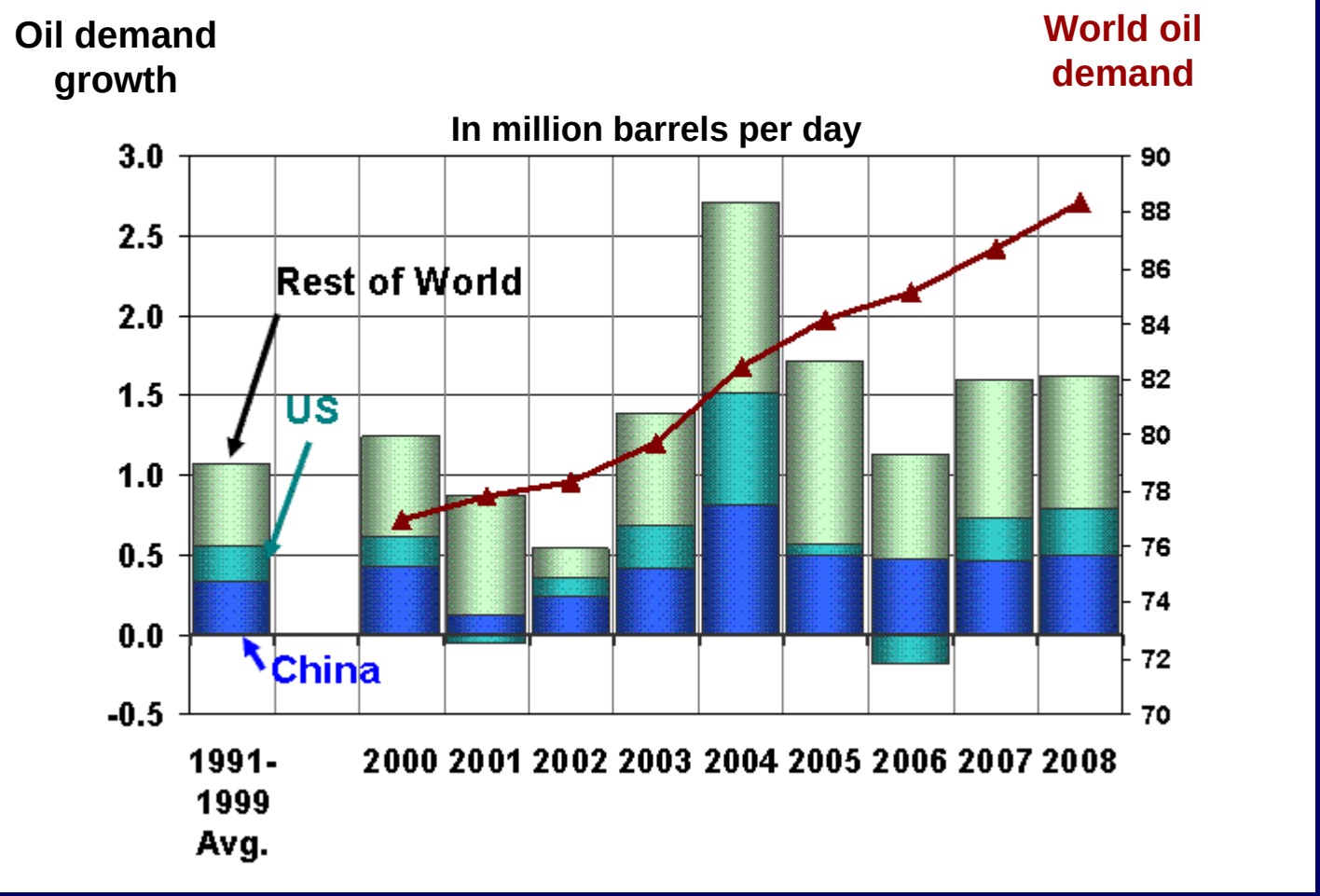
World oil demand growth

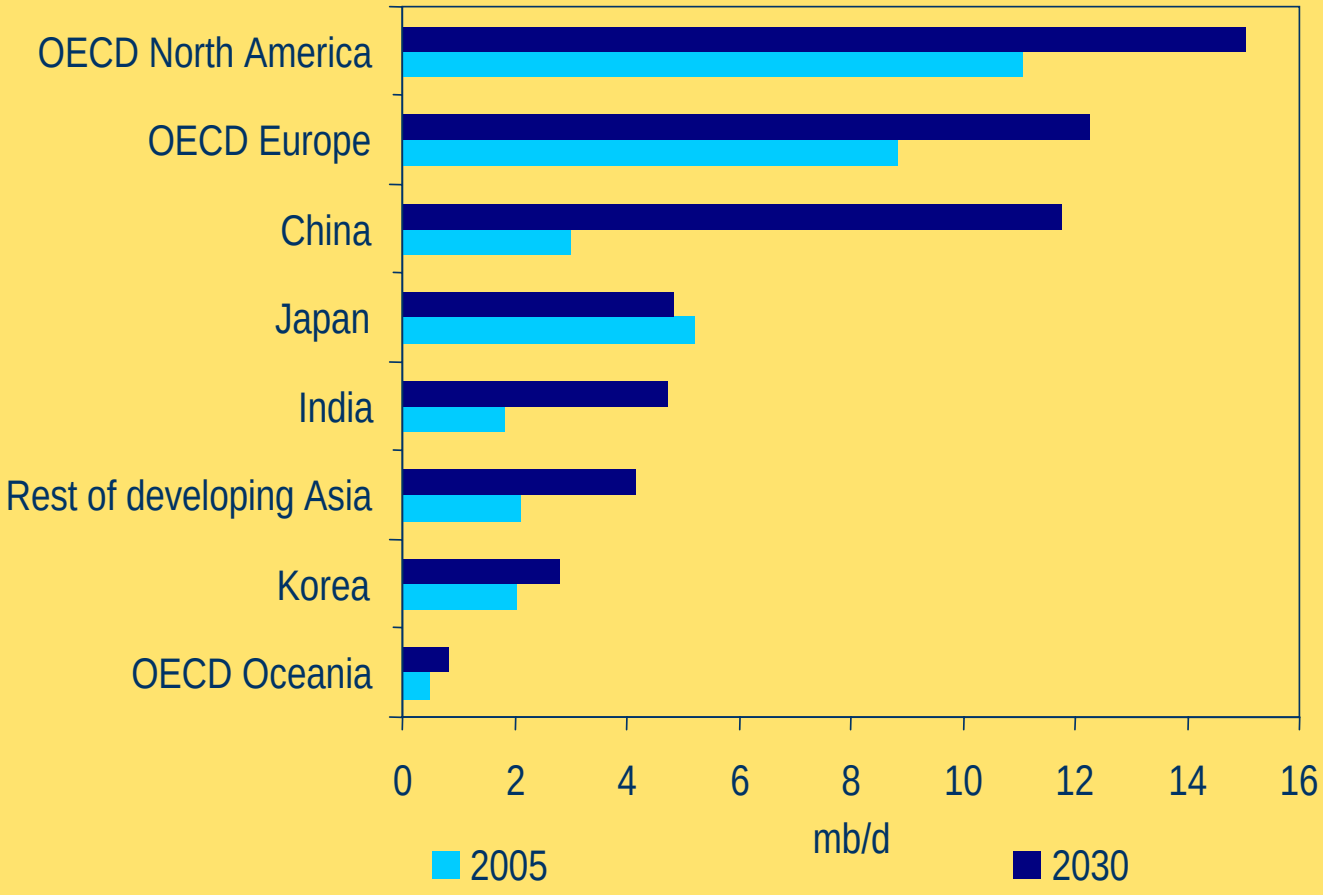


EIA Short-Term Energy Outlook, February 2007

Figure 4

World Energy Outlook 2006

Reference Scenario: Net Oil Imports



China sees the biggest jump in oil imports in absolute terms, but North America remains the largest importer

Figure 5

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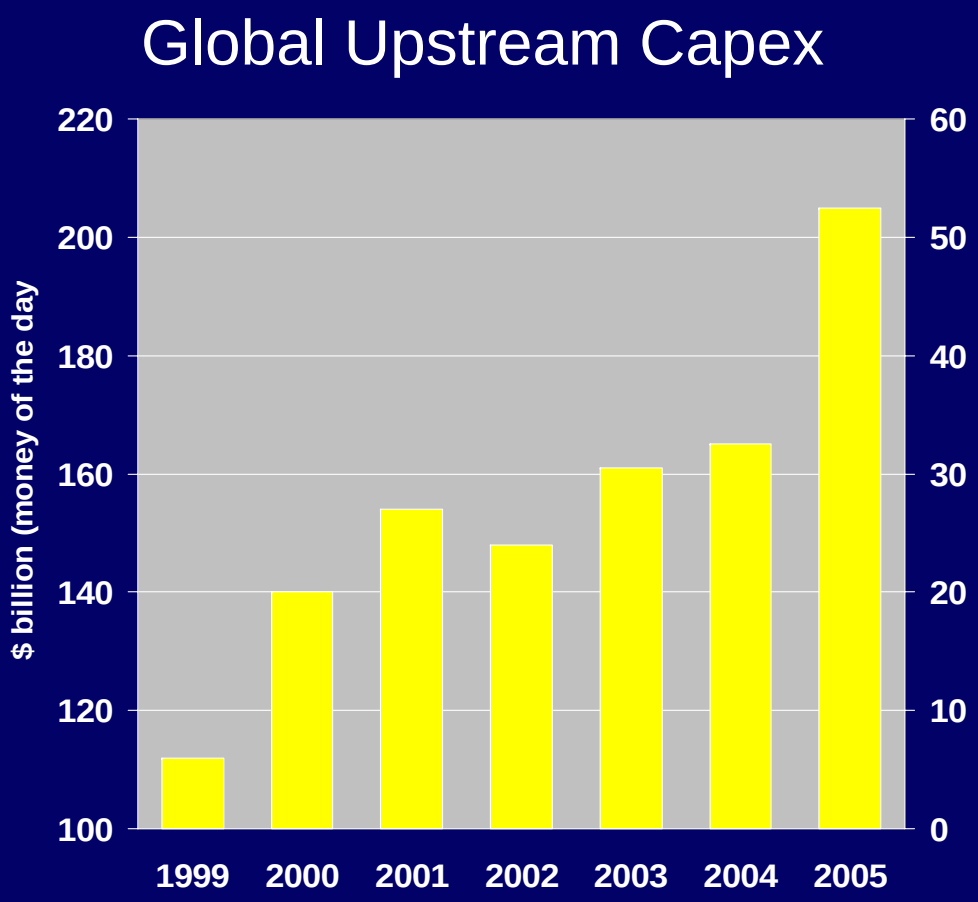
Industry investment



- Upstream investments
  - Up by ~ 90% since 1999
  - In 2005: $200 billion
  - In 2006: $260 billion
- Investment requirement to 2030
  - $200 billion annually
  - In total $ 5 trillion

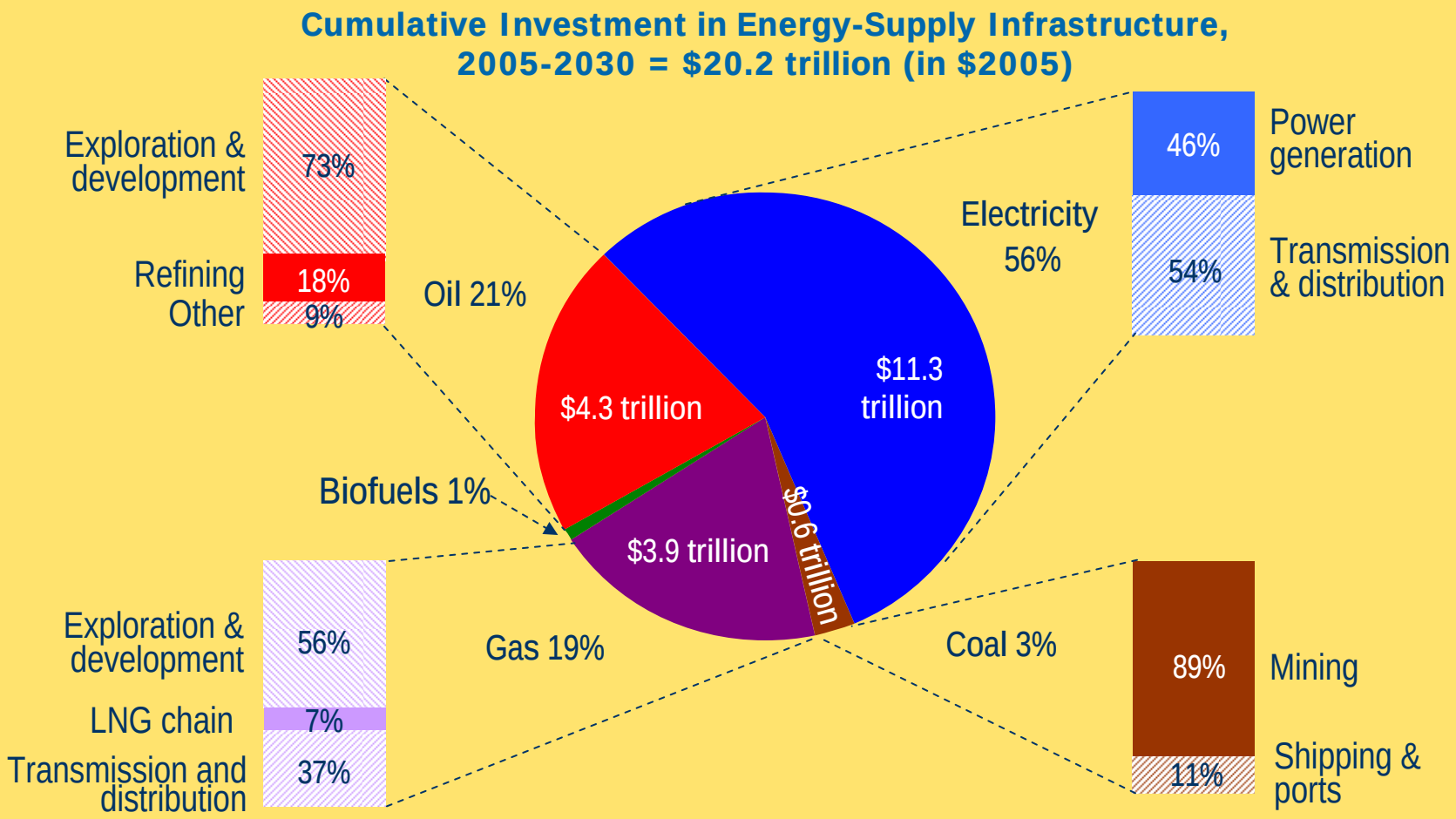
Source : J.S Herold / Harrison Lovegrove / IEA 2006

Figure 6

World Energy Outlook 2006

Reference Scenario:

Will the Investment Come?



Just over half of all investment needs to 2030 are in developing countries, 18% in China alone

Figure 7

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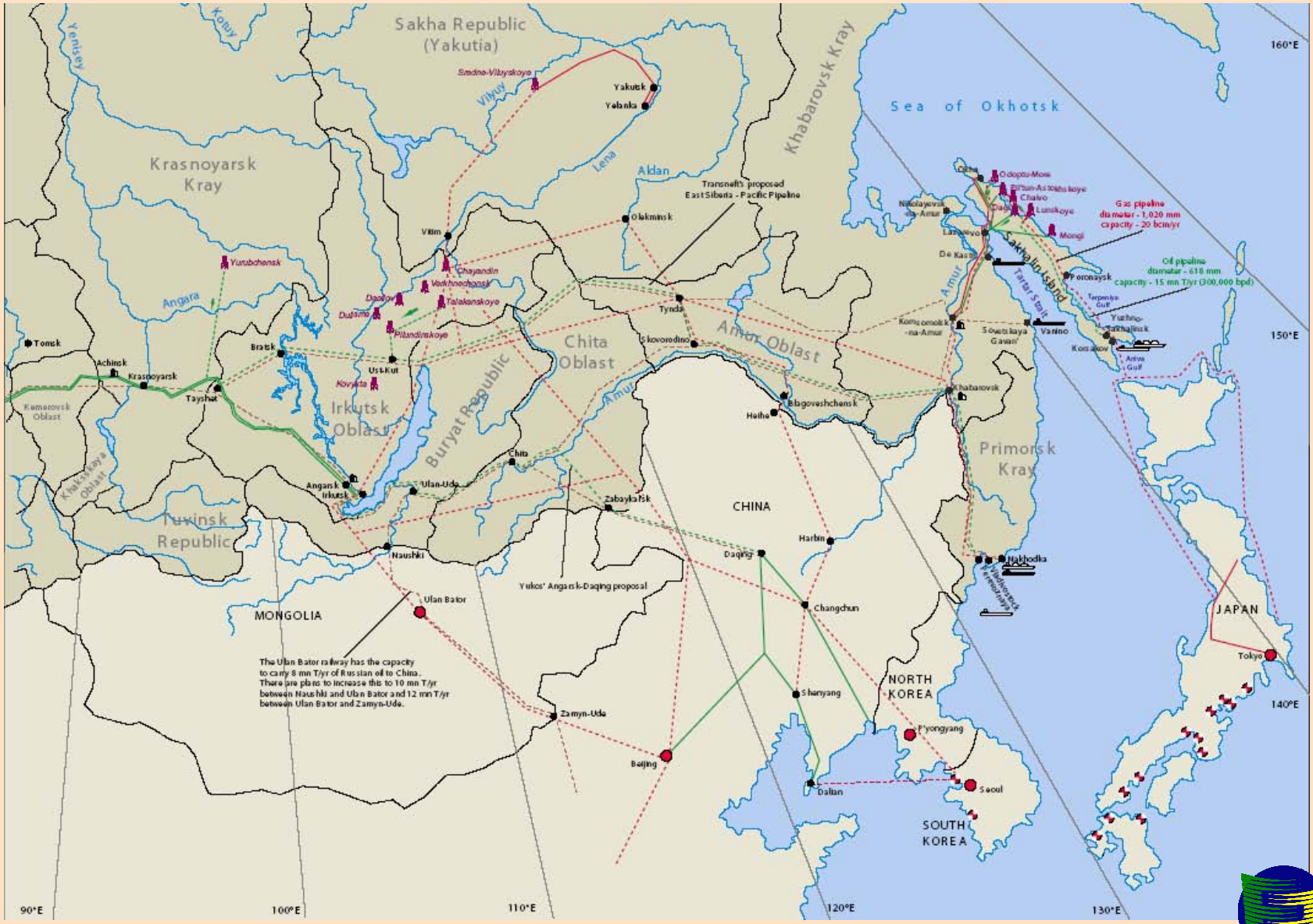
ENERGY ECONOMY:
DEMAND FOR QUALITY OF REGULATORY FRAMEWORK

Energy projects (compared to other industries):

- Highest capital intensity (absolute & unit CAPEX per project),
- Longest project life-cycles,
- Longest pay-back periods,
- Geology risks (+ immobile infrastructure, etc.),
- Highest demand for legal & tax stability,
- Role of risk management.

=> Higher demand for “quality” of legal and regulatory framework compared to other industries

EXISTING AND PROJECTED ENERGY INFRASTRUCTURE IN THE RUSSIAN EASTERN SIBERIA AND FAR EAST



Dr. A. Konoplyanik, NAGPF, Novosibirsk, 18-19.09.2007 - Figure 9

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FINANCING ENERGY PROJECTS: FROM EQUITY TO DEBT FINANCING

Equity/debt financing ratio:

Pre-1970's = ~ 100 / ~ 0

Nowadays = ~ 20-40 / ~ 60-80,

f.i. most recent:

BTC pipeline = 30 / 70

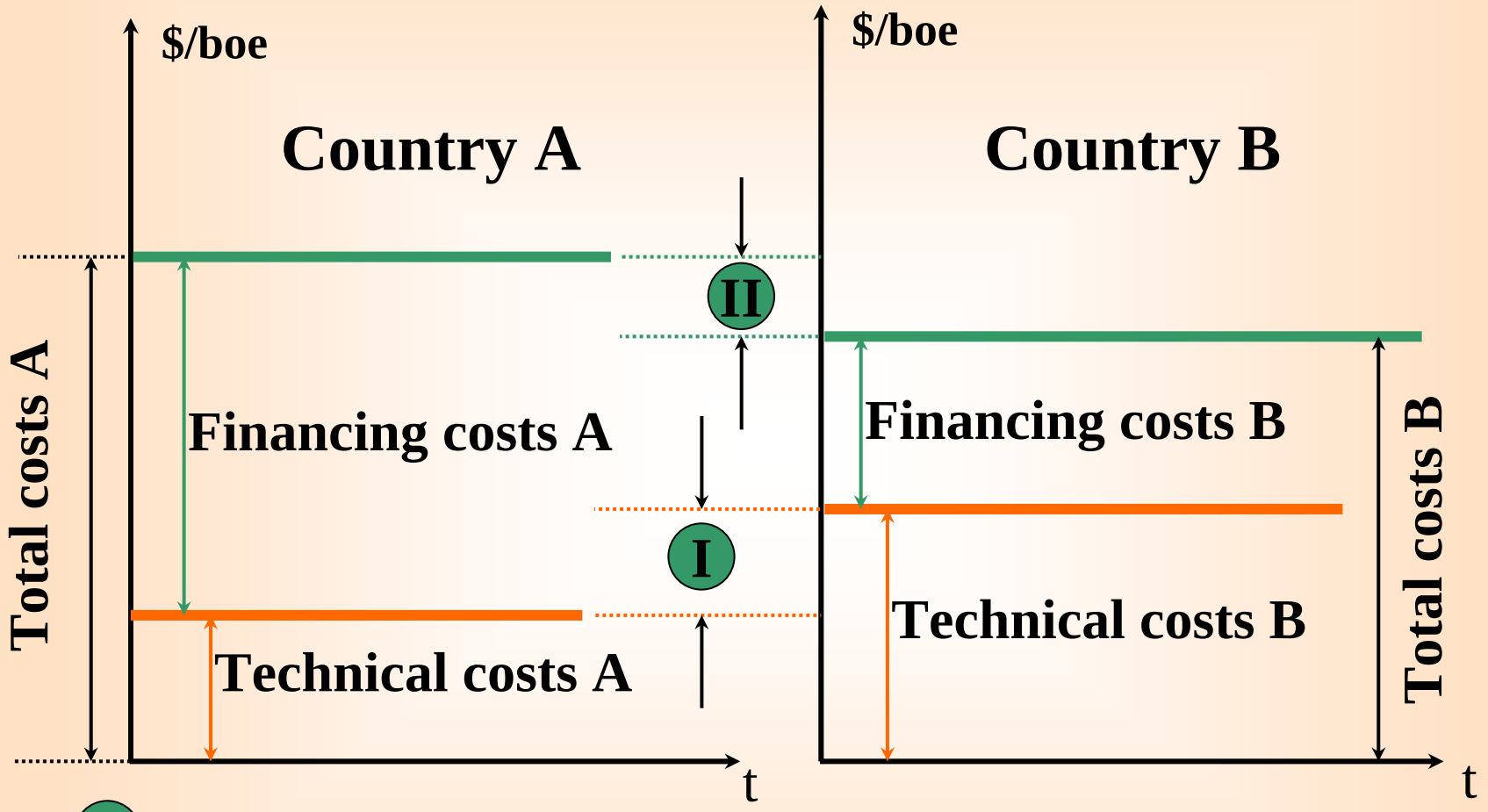
Sakhalin-2 (PSA) = 20 / 80

(2 fields+pipeline+LNG plant)

➔ **Increased role of financial costs (cost of financing) of the energy projects**

➔ **Availability and cost of raising capital = one of major factors of competitiveness with growing importance in time**

“NATURAL” VS. FINAL COMPETITIVE ADVANTAGES OF ENERGY PROJECTS



I “Natural advantage” of country A over country B

II Final competitive *dis*advantage of country A over country B

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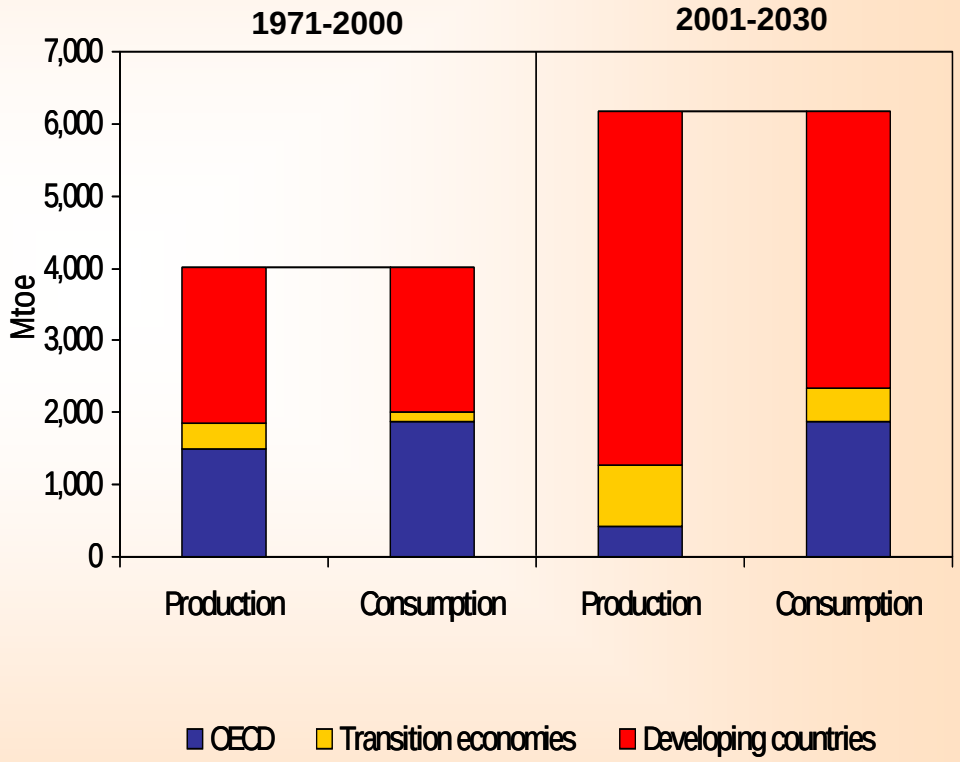
GLOBAL ENERGY TRENDS:
WHY NON-OECD IMPORTANT

2001-2030:

- **Increase in energy production:**
  95% outside of OECD
- **Increase in energy consumption:**
  70% outside of OECD
- **Cumulative energy investment:**
  - 50% from non-OECD to non-OECD markets, and
  - 10% from non-OECD to OECD markets

Increase in World Energy Production and Consumption
(Source: IEA WEIO 2003)



DIFFERENT STAGES OF MARKETS' DEVELOPMENT – DIFFERENT TYPES OF RISKS (1)

- **NE Asia/Russia = transition & investment risks (risks related to transition to new economic & political model + market stage of intensive formation of infrastructure):**
  - scale of demand predetermines scale of projects,
  - extremely high capital intensity of the projects due to lengthy energy value chain from resource to the consumer (+ imputed costs of creating general economic infrastructure),
  - developing & transition economies – problems of investment legislation (stability, fiscal vs. investment provisions, etc.),
  - bilateral political issues within cross-border energy flows (supply security)

Key importance of ECT investment provisions

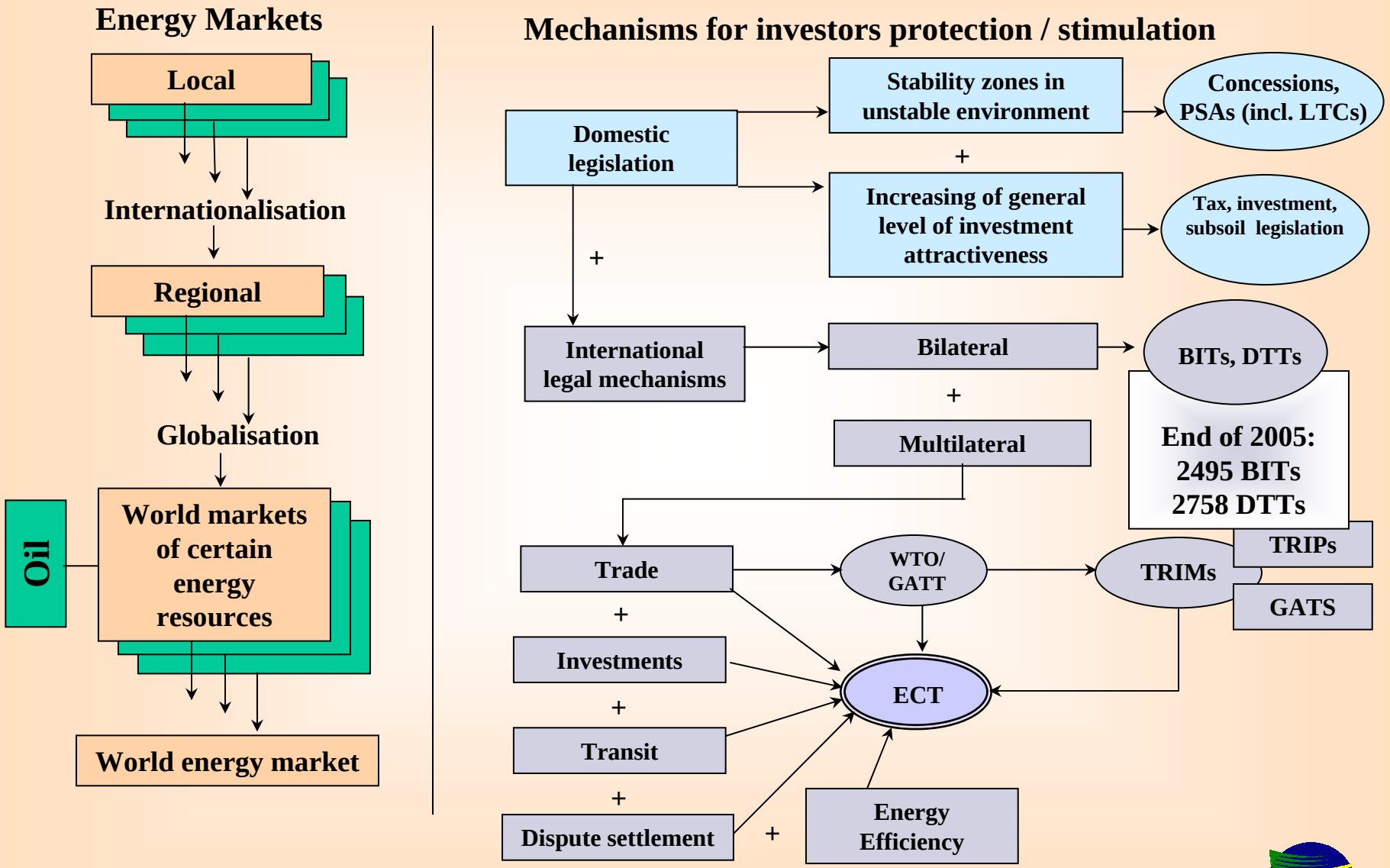
DIFFERENT STAGES OF MARKETS' DEVELOPMENT – DIFFERENT TYPES OF RISKS (2)

- **Europe/EU = liberalisation & investment risks (risks related to perfection of existing economic & political model):**

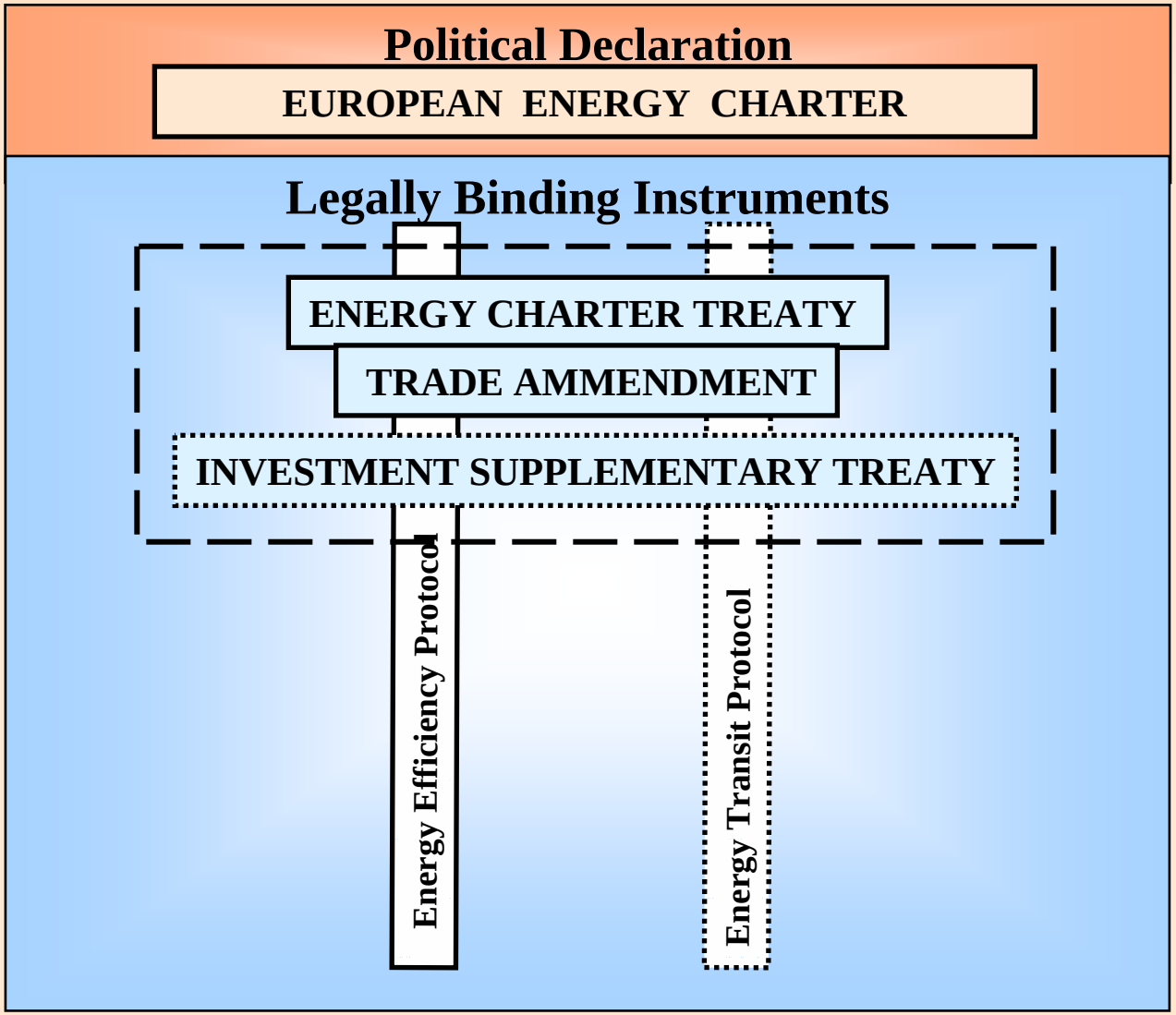
  (1) forced competition, "positive" discrimination of incumbents,
  (2) long-term contracts vs. short-term contracts & spot trade,
  (3) unbundling, mandatory TPA = new investment risks
  (4) competition vs. new investments (Art. 22 Second EU Gas Directive = derogation from EU rules as basis for new investments),
  (5) downstream EU competition = downgrading pressure on producers/suppliers vs. upgrading pressure of natural factors on production costs within key non-EU producers,
  (6) internal EU energy market is in transition: EU Gas Directives - First 1998, Second 2003, Third 2007/08 (?)

  Key importance of ECT transit & investment provisions

DEVELOPMENT OF ENERGY MARKETS AND MECHANISMS FOR INVESTORS PROTECTION / STIMULATION



ENERGY CHARTER AND RELATED DOCUMENTS



- in force

- negotiations not finished yet

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ENERGY CHARTER SPECIFIC ROLE

- **Energy Charter *Treaty*:**

  - Unique coverage of different areas for *energy* cooperation:
    - investment, trade, transit, energy efficiency, dispute settlement,
    - energy materials & products + energy-related equipment,
    - 51 member-states (52 CPs) + 20 observer-states + 10 observer international organisations

  - First and only one multilateral investment agreement with high standard of investment protection, incl. dispute settlement

- **Energy Charter *process*:**

  - *Implementation* of ECT,

  - Specialized forum for "*advanced" discussion* of the issues of energy markets evolution that *might create new risks* for development of energy projects in ECT member-states,

  - Platform for *preparation of new legally binding instruments* to diminish such risks within ECT member-states (e.g. broadening & deepening of ECT & upgrading its "minimum standard").

SELECTED INTERNATIONAL INVESTMENT-RELATED AGREEMENTS

Organisation (member-states/CPs)	Legal Status	Scope	Investment	Trade	Transit	Energy Efficiency	Dispute Settlement
ECT (51/52)	**LB**	**Energy**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
WTO (149)	LB	General	(Yes?) (Services)	Yes	*Yes/No**	*No*	Yes
NAFTA (3)	LB	General	Yes	Yes	*No*	*No*	Yes
MERCOSUR (4)	LB	General	Yes	Yes	*No*	*No*	Yes
OECD (30)	LB	General	Yes	*No*	*No*	*No*	*No*
APEC (21)	*Non-* LB	General	Yes	Yes	*No*	*No*	*No*

*** application of GATT Art.V to grid-bound transportation systems is under debate**

Plus specialised energy-related organisations: OPEC, IEA, IEF, UN ECE (partly), IAEA, …
Plus specialised "regional" organisations: BSEC, BASREC, …

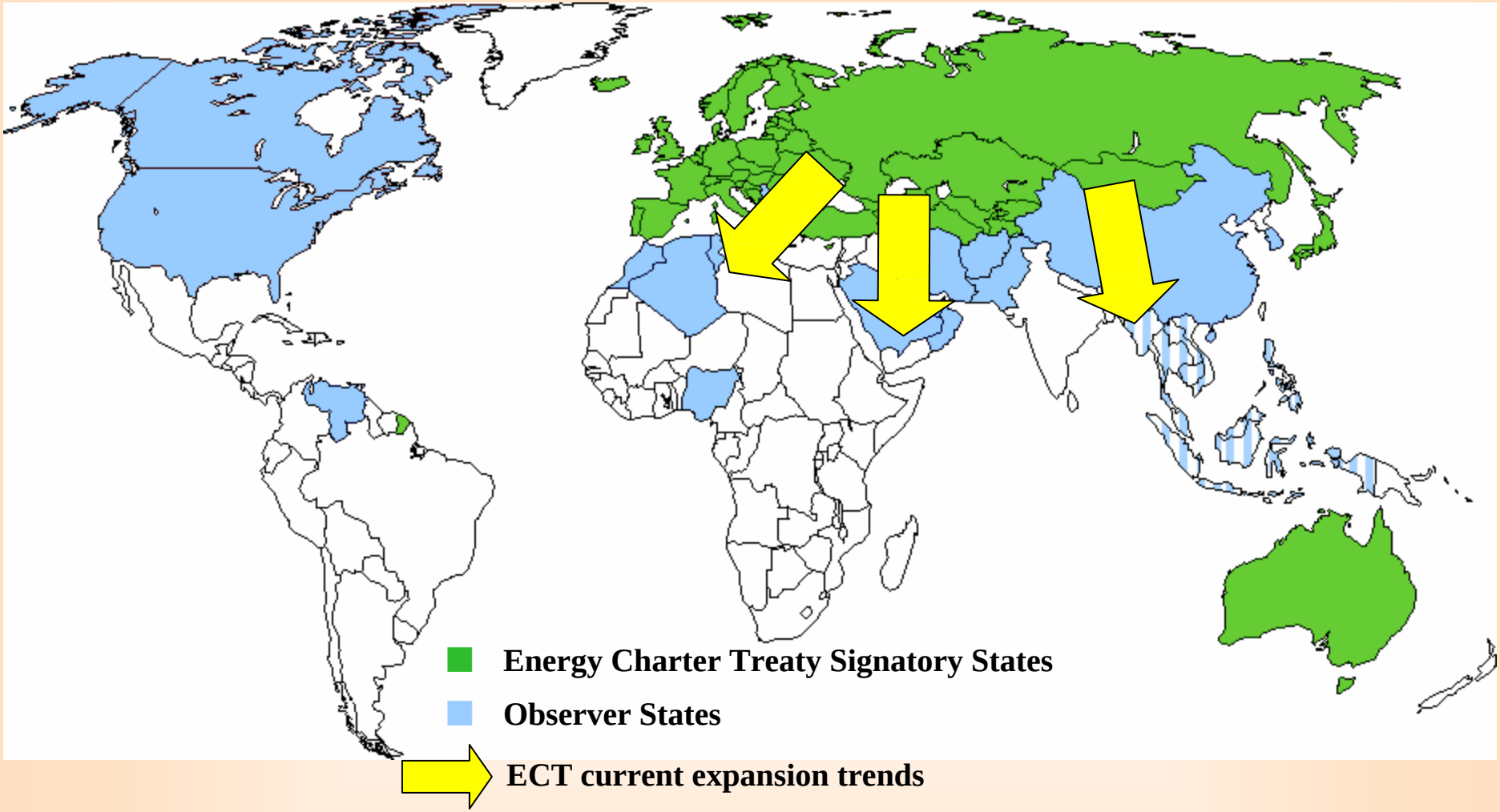
ECT = THE FIRST MULTILATERAL INVESTMENT AGREEMENT (1)

- Based on:
  - well-established practice of BITs (about 400 BITs at the beginning of the 1990's - around 2500 BITs as of today)
  - investment chapter XI of NAFTA (US, Canada, Mexico)
  - some interaction with then proposed "Multilateral Agreement for Investment" (MAI – aborted in 1998)
- Within 51 member-states ECT is equal to 1275 BITs
- MFN and National Treatment for investors:
  - *hard-law* obligations (binding guarantee) of non-discriminatory treatment for *post*-establishment phase,
  - *soft-law* obligations for *pre*-establishment phase (stage of making investment)

ECT = THE FIRST MULTILATERAL INVESTMENT AGREEMENT (2)

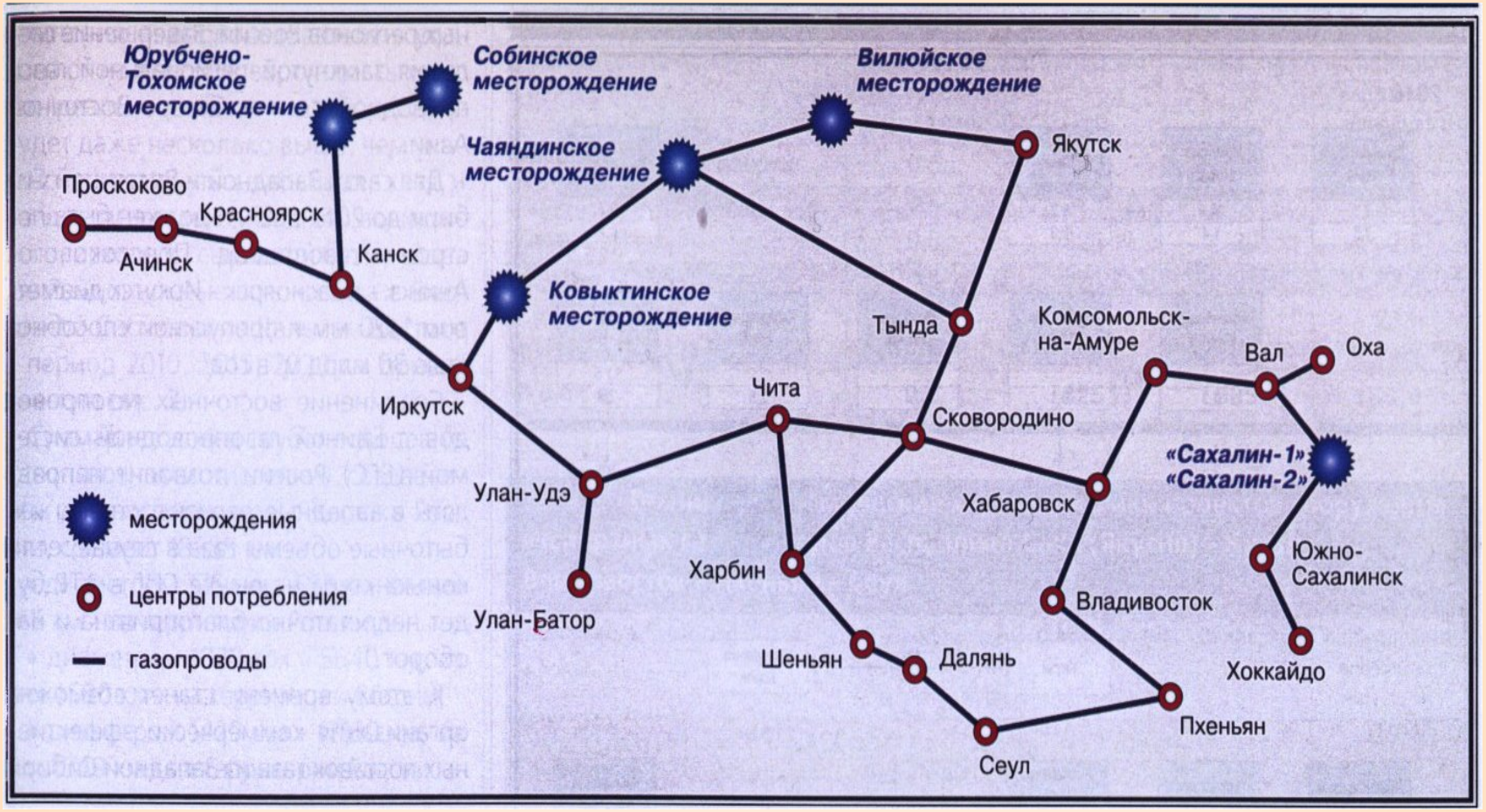
- Protection against key political/regulatory risk:
  - expropriation and nationalisation,
  - breach of individual investment contracts,
  - unjustified restrictions on transfer of funds
- Reinforced by access to binding international arbitration in case of dispute:
  - State-to-state, and *(NOVELTY!)* investor-to-state => direct dispute settlement at investor's choice at ICSID, UNCITRAL or ICC Stockholm (as of Sept.2007 18 cases known to ECS),
  - Awards:
    - ✓ final and enforceable under NY convention,
    - ✓ usually as entitlement to payment (no risk of vicious circle for retaliating measures),
    - ✓ retroactive to start of dispute, may include interest (no incentive to delay process)

ENERGY CHARTER PROCESS: GEOGRAPHICAL DEVELOPMENT



1. From trans-Atlantic political declaration to broader Eurasian single energy market
2. ECT expansion - objective and logical process based on clear economic and financial reasoning

OUTLINE OF THE GAS SUPPLY SYSTEM IN THE EAST OF RUSSIA AND NORTH-EAST OF ASIA (UP TO 2020)



According to the Institute of Oil and Gas Geology, Russian Academy of Sciences, Siberian Branch
Source: "Oil of Russia", № 11, 2004, p.59

TOTAL CAPEX IN DEVELOPMENT OF GAS-TRANSPORTATION SYSTEM IN THE RUSSIAN EASTERN SIBERIA AND FAR EAST

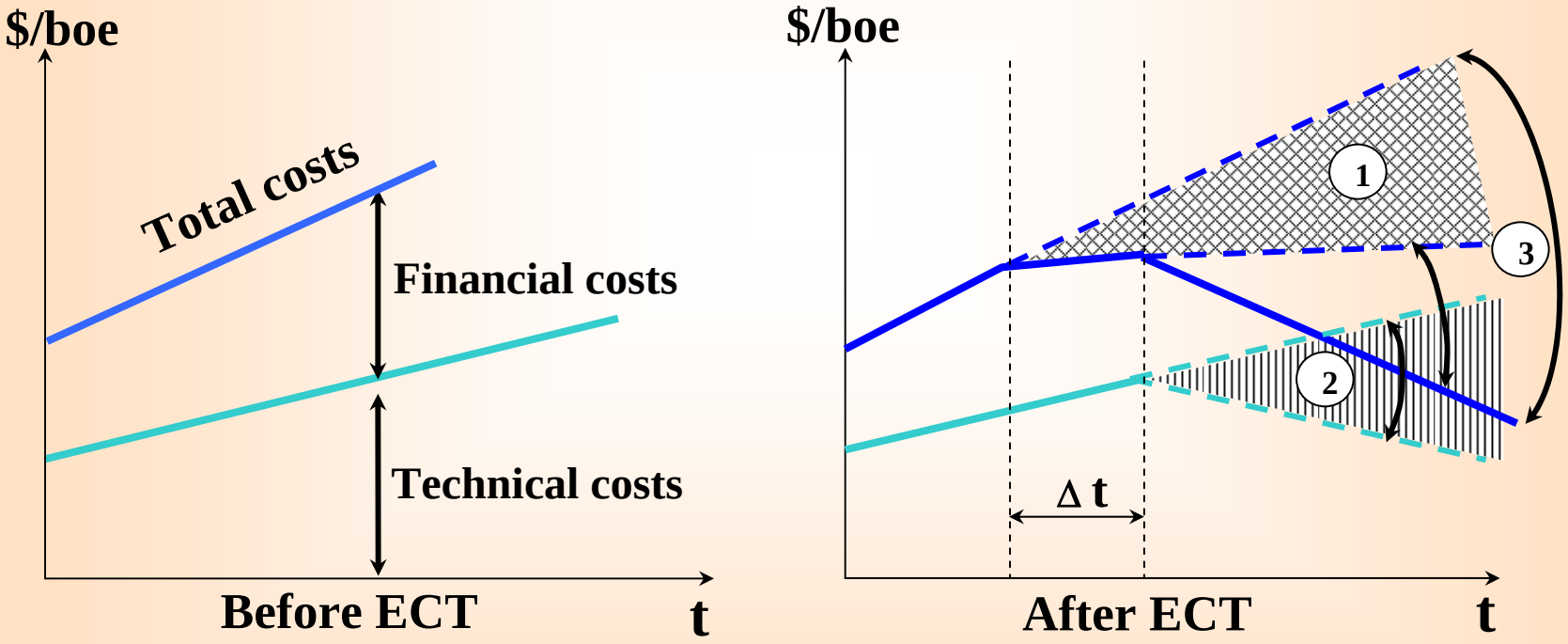
Pipeline diameter, mm/inches	Up to 2010	2011-2015	2015-2020	Total up to 2020
325/…	0	166	0	166
1020/…	1605	885	4625	7115
1420/…	6011	12248	0	18259
Total	7616	13299	4625	25540

According to Institute of Oil and Gas Geology, Russian Academy of Sciences, Siberian Branch
Source: "Oil of Russia", № 11, 2004, p.59

ECT IS BUSINESS-ORIENTED TREATY (how it works)

ECT/Legislation → ↓ risks → ↓ financial costs (cost of capital) = (1) →
↑ inflow of investments (i.e. ↑ FDI, ↓ capital flight) → ↑ CAPEX → ↓ technical costs = (2) →
(1) + (2) = (3) → ↑ pre-tax profit → ↑ IRR (if adequate tax system) → ↑ competitiveness →
↑ market share → ↑ sales volumes → ↑ revenue volumes

ECT provides multiplier legal effect in diminishing risks with consequential economic results in cost reduction and increase of revenues and profits



(1) Δ Financial costs (2) Δ Technical costs (3) Cumulative Δ costs

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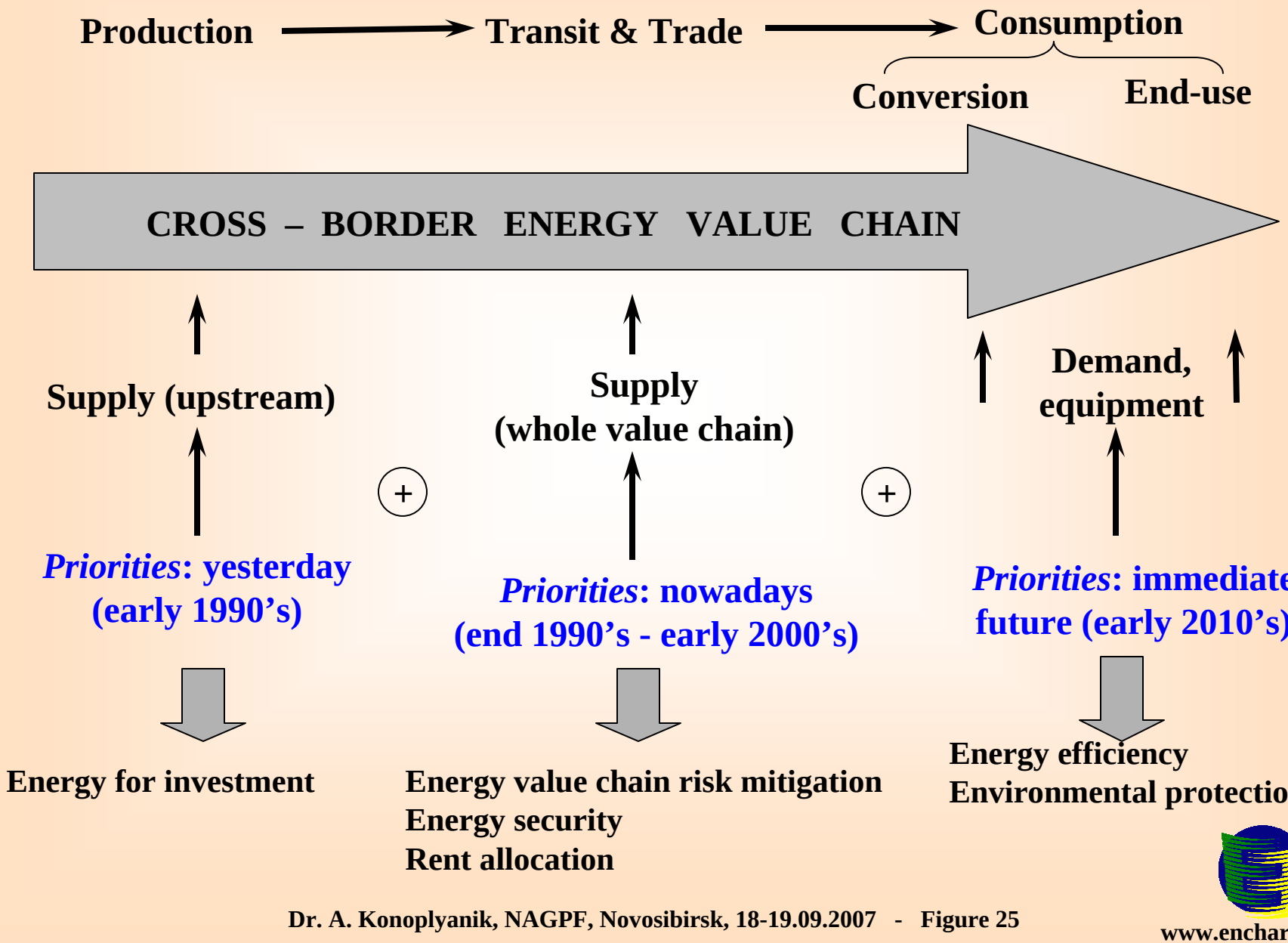
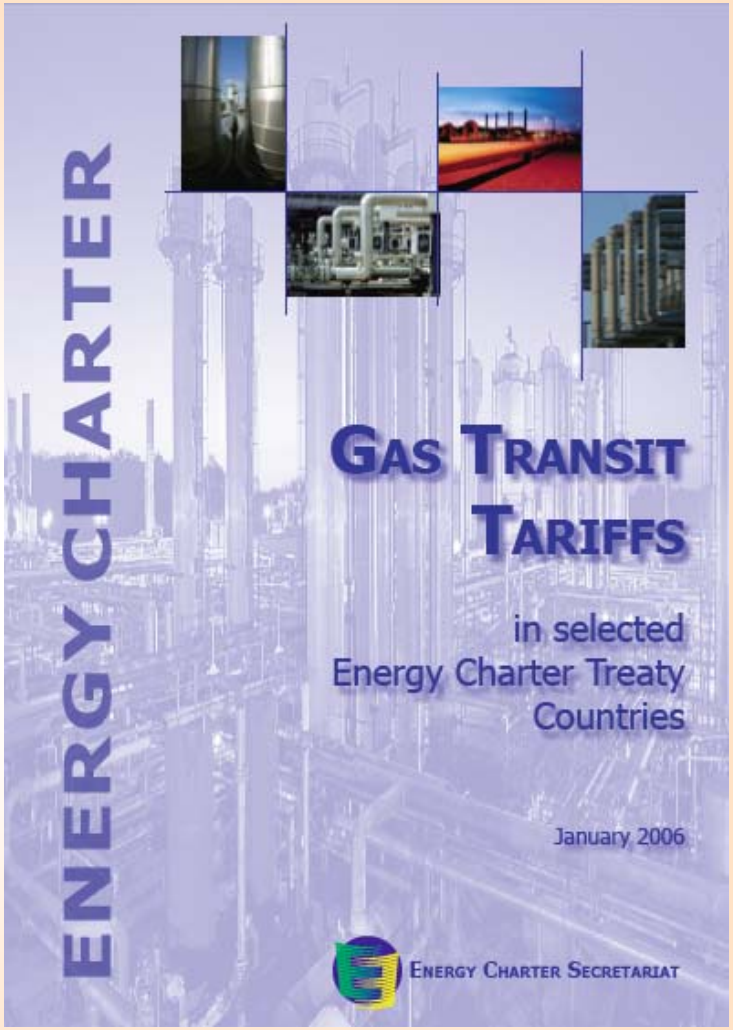
BROADENING ENERGY CHARTER PRIORITIES



REPORT IN ENGLISH AND RUSSIAN BY THE ENERGY CHARTER





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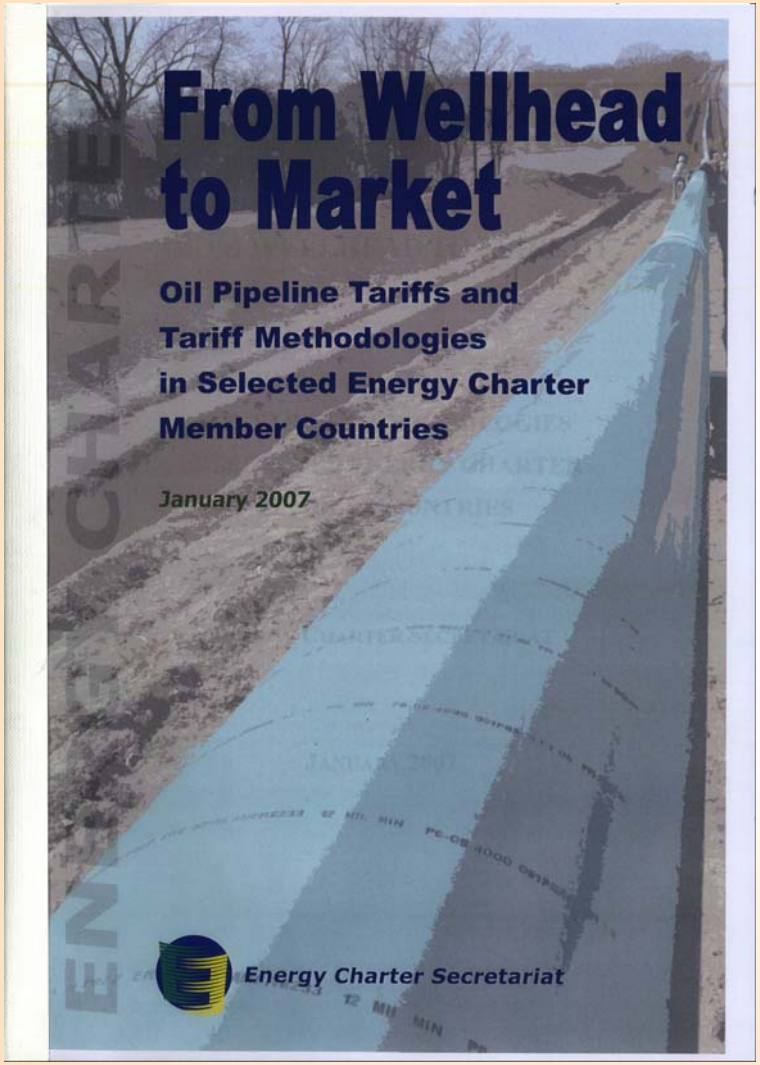

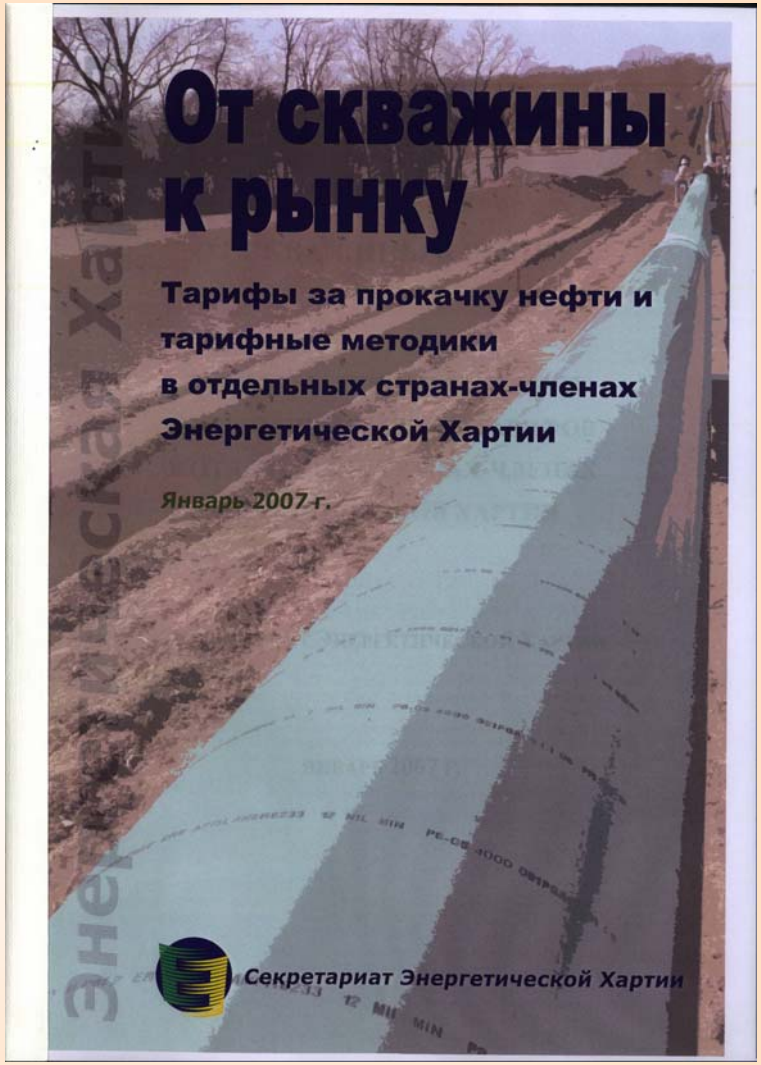

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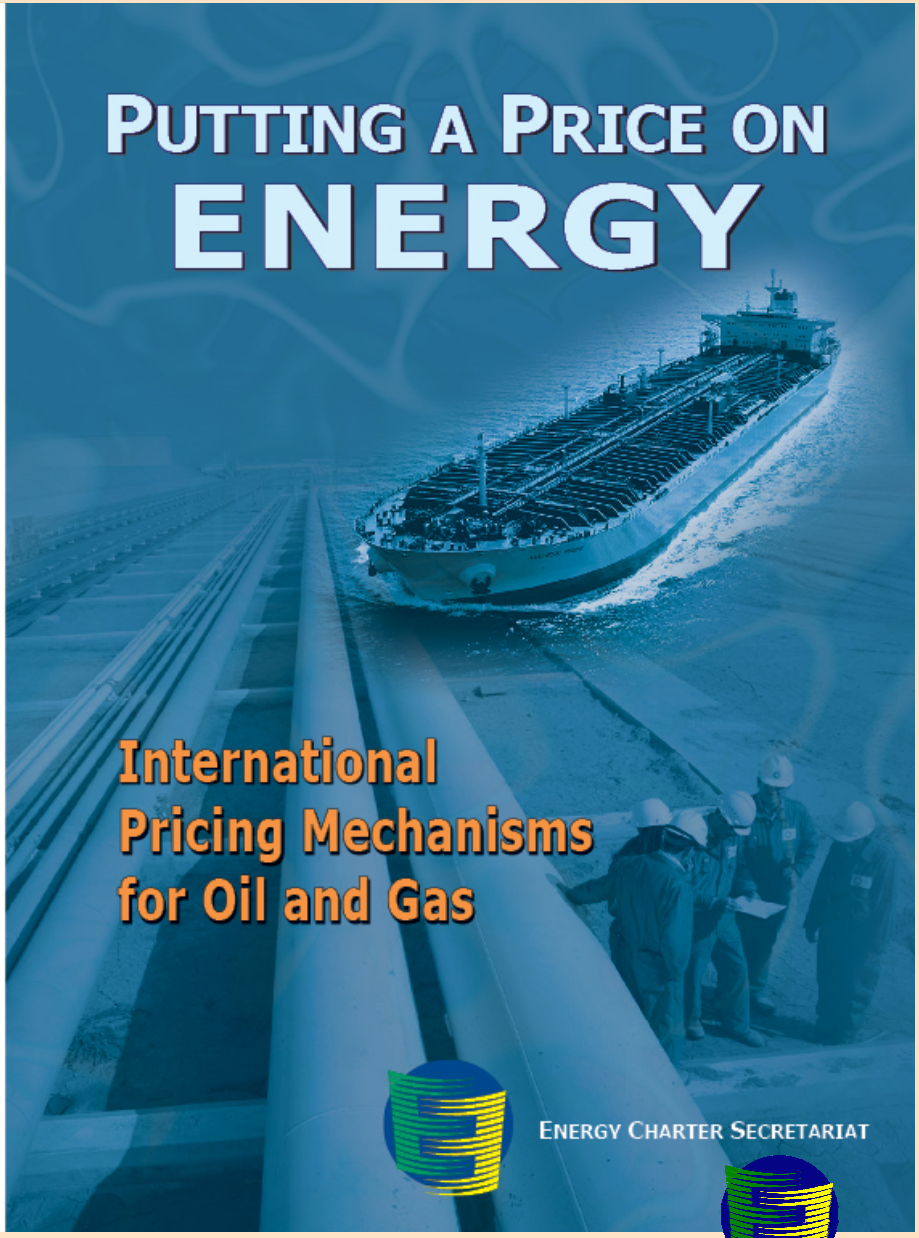
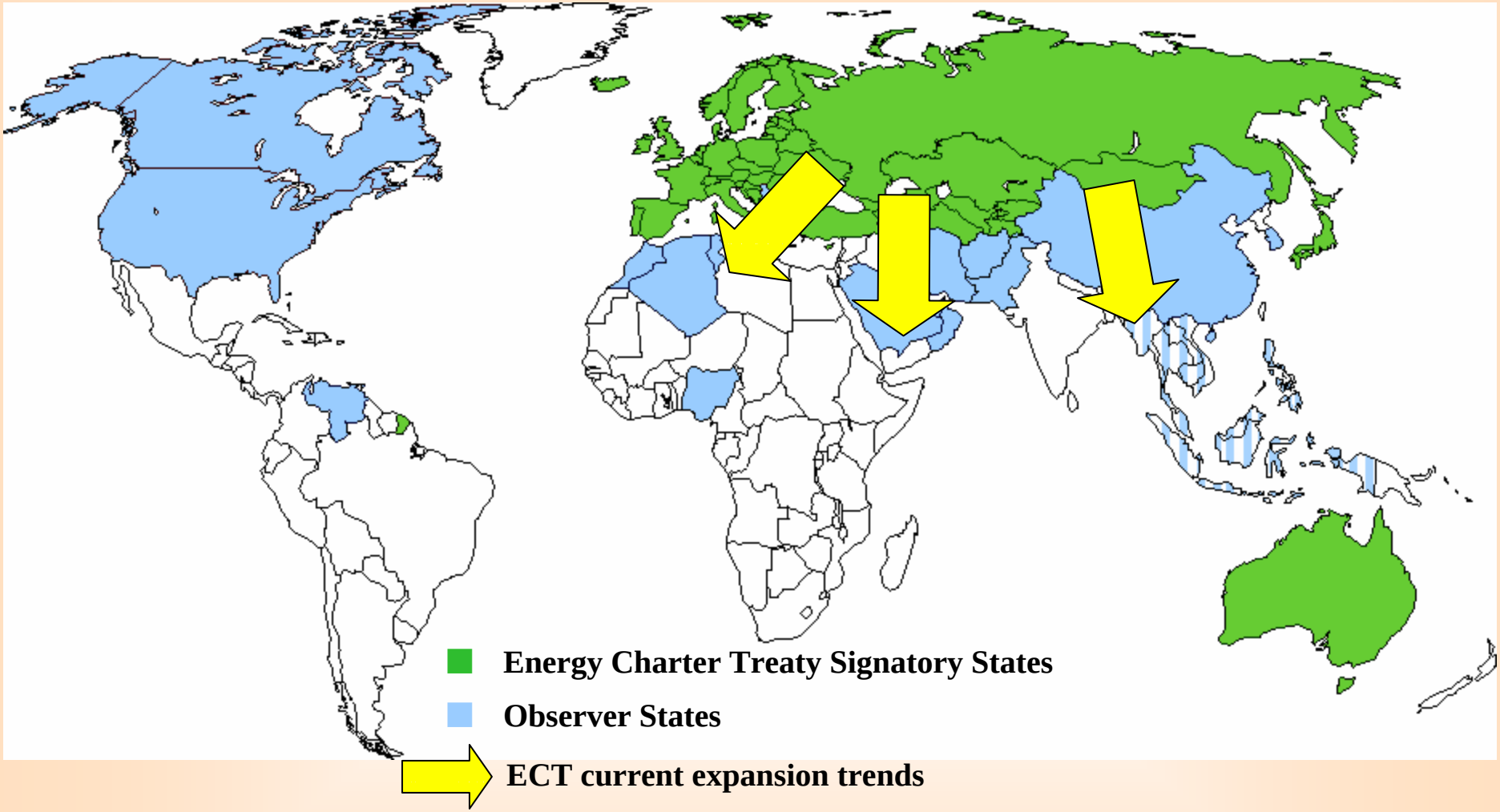


LIST OF ECT-BASED INVESTOR-STATE DISPUTE SETTLEMENT CASES

	Investor	State	Reg. and procedure	Status
1	AES Summit Generation Ltd. (UK)	Hungary	2001 - ICSID	Settlement agreed by the parties
2	Nykomb Synergetics AB (Sweden)	Latvia	2001 - Stockholm	Award rendered on 16.12.2003
3	Plama Consortium Ltd. (Cyprus)	Bulgaria	2003 - ICSID	Pending; decision on jurisdiction 2005
4	Petrobart Ltd. (Gibraltar)	Kyrgyzstan	2003 - Stockholm	Award rendered on 29.03.2005
5	Alstom Power Italia SpA, (Italy)	Mongolia	2004 - ICSID	Settlement agreed by the parties
6	Yukos Universal Ltd. (UK – Isle of Man)	Russia	2005 - UNCITRAL	Pending
7	Hulley Enterprises Ltd. (Cyprus)	Russia	2005 - UNCITRAL	Pending
8	Veteran Petroleum Trust (Cyprus)	Russia	2005 - UNCITRAL	Pending
9	Ioannis Kardossopoulos (Greece)	Georgia	2005 - ICSID	Pending; decision on jurisdiction 2007
10	Amto (Latvia)	Ukraine	2005 - Stockholm	Pending
11	Hrvatska Elektropriveda d.d. (HEP) (Croatia)	Slovenia	2005 - ICSID	Pending
12	Libananco Holdings Co. Ltd. (Cyprus)	Turkey	2006 - ICSID	Pending
13	Azpetrol (Netherlands)	Azerbaijan	2006 - ICSID	Pending
14	Cementownia “Nowa Huta” S.A. (Poland)	Turkey	2006 - ICSID	Pending
15	Europe Cement S.A. (Poland)	Turkey	2007 - ICSID	Pending
16	Liman Caspian Oil BV (Netherlands)	Kazakhstan	2007 - ICSID	Pending
17	Electrabel S.A. (Belgium)	Hungary	2007 - ICSID	Pending
18	AES Summit Generation Limited (UK)	Hungary	2007 - ICSID	Pending

The information above was compiled from various public sources; while the Secretariat has made every effort to ensure that this information is reliable, its accuracy and completeness cannot be guaranteed. For more details on the cases, please consult www.encharter.org

ENERGY CHARTER PROCESS: GEOGRAPHICAL DEVELOPMENT



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A.KONOPLYANIK'S MOST RECENT BOOKS ON THE TOPICS OF TODAY'S PRESENTATION





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