

# The socio-ecological dimension of the New Silk Road - will it be grey or green?

Seminar: The Belt & Road Initiative - The European and International Responses to China's Initiative

European Transport Workers' Federation

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## 2 preliminary remarks

In times of signs of increasing cold wars it can be useful to say:  
**China is not a model for Europe – Europe is not a model for China**

The **historical continuity** of Chinese civilization has been essentially determined by **unity and integration since >2200 years**, and also by high differentiation **and cohesion** processes

- Important especially for transport issues (compare barriers for train at borders in Europe)

# Will the New Silk Road be **grey** or **green**?

*Preliminary answer:*

**Open question**

**- it depends - also on us**

Will it be possible to **realize WIN-WIN**-strategies ?



7/9/2013, U. of Nazarbayev, Kazakhstan:

Jointly building Silk Road Economic Belt with Central Asian countries

From: Michael Dunford &  
Liu Weidong

3/10/2013, Congress, Indonesia

Jointly building the 21<sup>st</sup> Century  
Maritime Silk Road with ASEAN  
countries



Josef BAUM - BRI - gray or green? Vienna 29 11 2022 ETF-  
Seminar

- **Some reasons for BRI from development of Chinese economy**
  - ✓ **Resources,**
  - ✓ **Capacity utilisation,**
  - ✓ **Economies of scale; economies of scope**
  - ✓ **Shifting in structure of exports**
- **Also reaction to US policy turn to Pacific**

(„America's Pacific Century“ (HillaryClinton, Foreign Policy, 2011))
- **Reaction against containment strategy by US**

# China's Belt and Road Initiative (BRI)

- **At a cross roads for globalisation** in a world of **geo-economic competition**, collaboration and competing development models
- China's (BRI) reflects China's rise as a **global power, industrial redeployment, increased outward investment, and need to diversify energy sources and routes**
- is a call for an open and inclusive economic, political and cultural exchange that draws on the deep-seated meanings of the ancient Silk Roads, and
- involves new multilateral **financial instruments** to lay the infrastructural foundations and establish the industrial capacity to secure and solidify China's relations with Europe and for extend the march of modernization and poverty reduction to emerging countries.

# Globalisation at a crossroads: retreat from globalization, geoeconomic competition and gated globalisation

Slide from: Michael Dunford &  
Liu Weidong

- Globalisation phase reached limits with western financial crisis
- Global interdependence resulting from globalisation after collapse of SU is used as political instrument:
  - economic warfare (sanctions, trade restrictions and regulations, freezing of financial assets, domestic MNCs, boycotts, political control of migration flows)
  - Institutional conflict (gridlock institutions, US demands compliance with laws it will not ratify, creation of parallel complementary and potentially alternative institutions, exclusive groups such as TPP, TTIP) and
  - physical and virtual infrastructure competition, asymmetric interdependence of cores and peripheries
- Countries seek to protect themselves, decrease vulnerabilities



# BRI is a call for inclusive globalisation

- Covering but not limited to the areas along ancient silk roads; open to all countries for engagement
- Advocating harmony and dialogues among different civilizations and respecting development paths chosen by different countries
- **Following market operation and free trade norms**
- Seeking mutual benefit and conjunction of interests of all parties involved by emphasizing “jointly”
- Lift all boats

*Slide from: Michael Dunford &  
Liu Weidong*

“New Silk Road” is symbolic

➔ BELT AND ROAD (initiative)= BRI  
=One belt one road (OBOR)

*biggest investment strategy/platform in history*

**recently slowing down**

because of geopolitical developments

It is targeted at creating a **high-level COOPERATION NETWORK among the countries involved**

# Eurasian challenges

Slide partly from: Michael Dunford &  
Liu Weidong

- National political **instability, cross-border crime, cross-border nationalisms, separatism, ethnic, religious and sectarian conflicts**, religious extremism, poverty and under-development.
- **Complex inter-country relations** and tensions (over borders for example between Uzbekistan and its Tajik and Kyrgyz neighbours)
- Important also for **economic basis for security and peace from Afghanistan - Iran - Irak – Syria**. -Very relevant for Europe – migration!

- „**Inclusive globalisation**“ – less disparities at borders
- Development of **Eurasia**
- Fukuyama (2016) argued that BRI is part of ‘an historic contest ... over **competing development models** ... between China ... and the United States (US) and other Western countries ... [whose] outcome will determine the fate of Eurasia for decades to come’.
- - **Notion „New silk road**“ minted by Hillary Clinton for a program -not realized for Afghanistan:

# 2011 US New Silk Road (NSR)

Slide from: Michael Dunford &  
Liu Weidong

- **A development and expansion of a Northern Distribution Network (NDN) to convey supplies from Europe across Russia to NATO forces in Afghanistan rather than through Pakistan.**
- US Secretary of State Clinton explained: 'Turkmen gas fields could help meet both Pakistan's and India's growing energy needs and provide significant transit revenues for both Afghanistan and Pakistan. Tajik cotton could be turned into Indian linens. Furniture and fruit from Afghanistan could find its way to the markets of Astana or Mumbai and beyond'

# Major axes

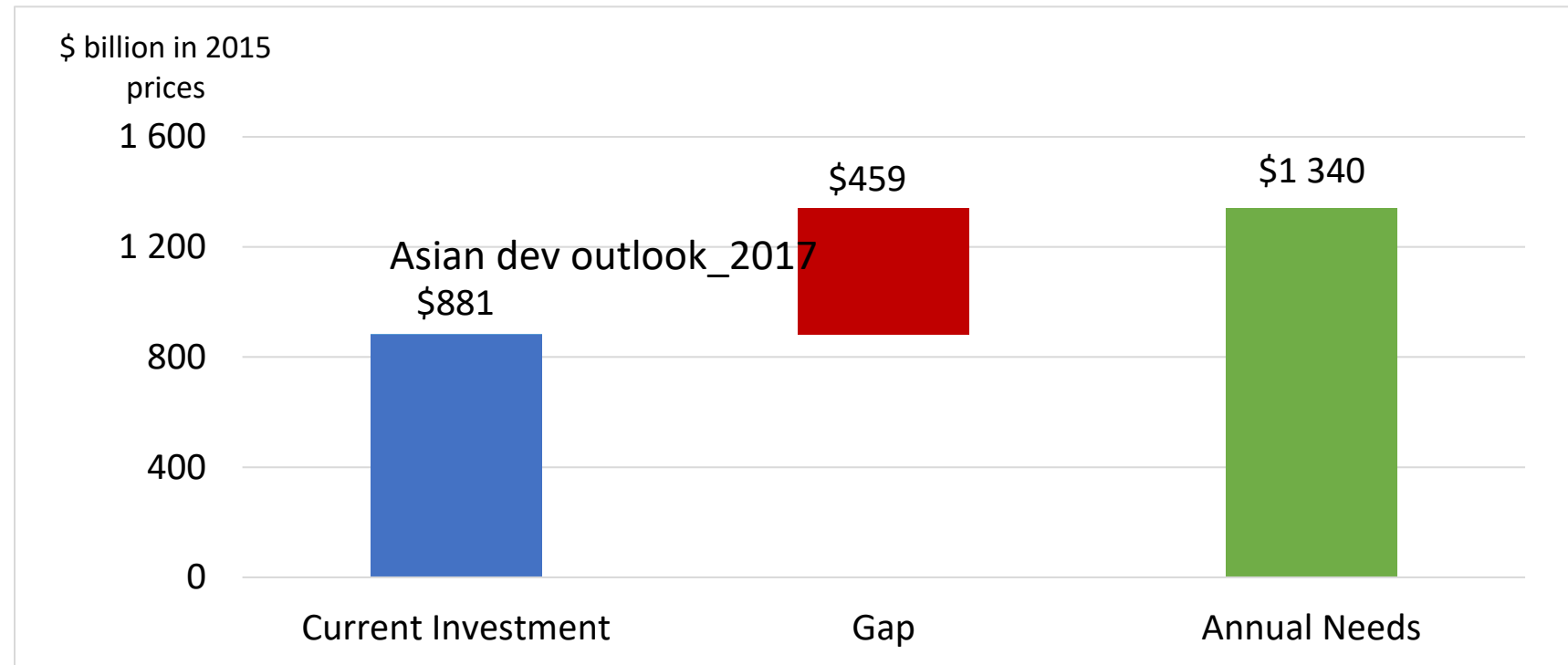


On land, the Initiative focuses on jointly building a **new Eurasian Land Bridge**, and developing **five economic corridors** (China-Mongolia-Russia, China-Central Asian-West Asia, China-Indochina Peninsula, China-Pakistan, and Bangladesh-China-India-Myanmar)

# Asia still has large infrastructure needs

## Meeting the Investment Gaps, 2016-2020 (annual averages)

[Asian Development Outlook 2018]



From: Michael  
Dunford &  
Liu Weidong



# Transatlantic Trade and Investment Partnership (TTIP), Trans-Pacific Partnership(TPP), Regional Comprehensive Economic Partnership (RCEP)

Slide partly based on: Michael Dunford &  
Liu Weidong

- In 2013 TTIP discussions. In 2011 the US had announced its '**Pivot to Asia**'. (In 2012 Russia also announced an Asian pivot marked by hosting the APEC summit in Vladivostok).
- In February 2016 a TPP involving 12 Pacific Rim countries was signed. US President Barack Obama announced that the TPP 'would give the United States an advantage over other leading economies, namely China', and that 'TPP allows America - and not countries like China - to write the rules of the road in the 21st Century, which is especially important in a region as dynamic as the Asia-Pacific'. Cancelled by Trump
- The **Regional Comprehensive Economic Partnership (RCEP)**  
- signed in November 2020 is the first free trade agreement among largest economies in Asia, including China, Indonesia, Japan, and South Korea; the largest trade bloc in history.





# Visions and actions

Slide from: Michael Dunford &  
Liu Weidong

Visions and actions proposes five cooperation priorities

- policy coordination
- facilities **connectivity**
- trade facilitation
- financial cooperation
- people-to-people bonds.

## *Some preliminary historical highlights:*

**Mozi** = Micius,

(ME-TI at Brecht, 470-391 BCE)

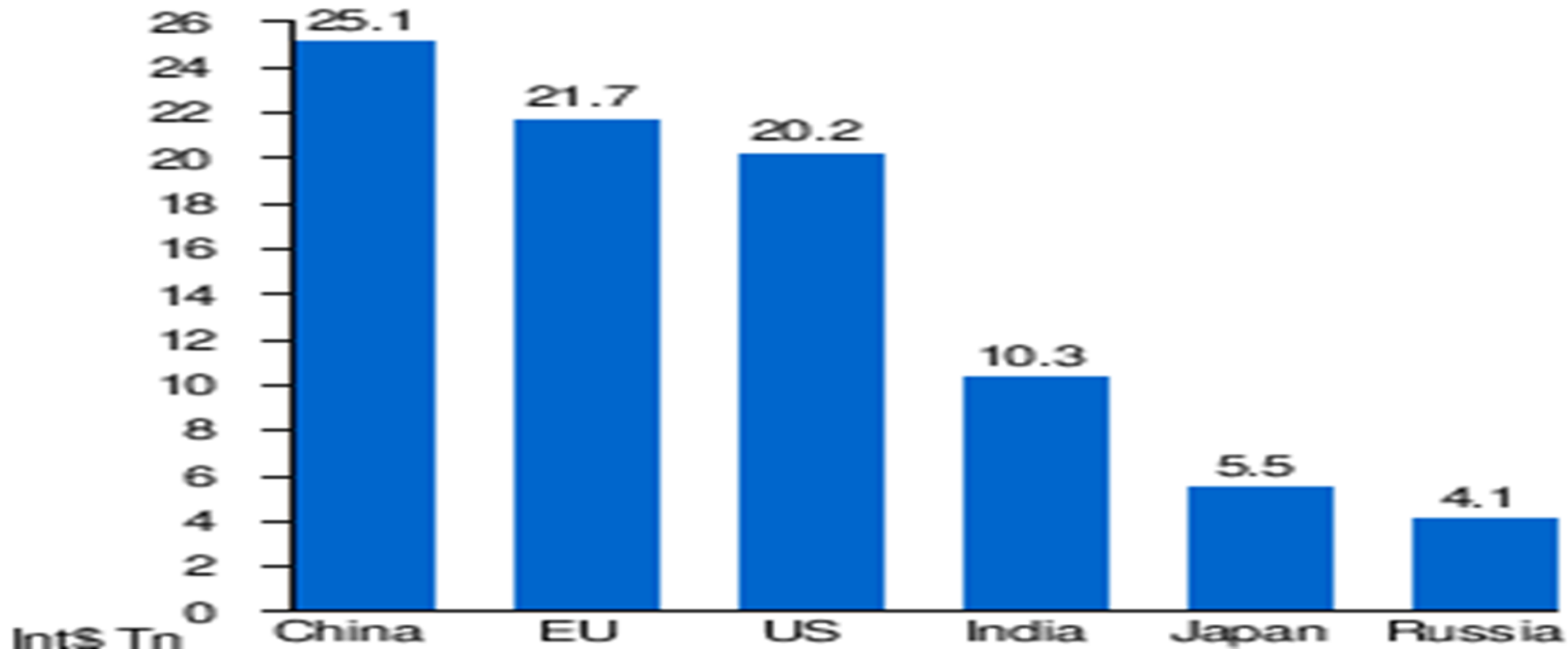
Somehow first philosopher with focus on solidarity - Mohism

**Zheng He** † 1433

Giant fleets to Africa and other regions



**Is China the second largest country-economy of the world?  
Will it outperform the USA in 2025 ?**



**Largest economies by PPP GDP in 2018.**

According to [International Monetary Fund](#) estimates

PPP: purchasing  
power parity

## Unique scale of the Chinese Economy

- The realization of **economies of scale** (mass production) and
- **economies of scope** (gains from combined production)

are “secrets” of the Chinese success

But:

In the current global configuration + oligopolies in most markets:

- Most resources which China buys and imports  
are **increasing in price**
- Most products which China has been selling  
and exporting - are **decreasing in price**

- **Unique size of “space-compressed” and “time-compressed” development**
- **very high population density in most eastern parts of the country (– “space-compressed”)**
- the total **size** of the population and economic activities,
- the sectoral dominance of the **industry** with a focus on export (world factory),
- rapid **urbanization** and
- the (“**time-compressed**”) rapidly **industrialization and catching up ...**

# Dimensions of the global economy 1700-1995

## Shares of World GDP

, 1700-1995 (per cent); Table 2.2a. from Maddison Angus (1999): *Chinese Economic Performance in the Long Run*

	1700	1820	1890	1952	1978	1995
China	23.1	32.4	13.2	5.2	5.0	10.9
India	22.6	15.7	11.0	3.8	3.4	4.6
Japan	4.5	3.0	2.5	3.4	7.7	8.4
Europe	23.3	26.6	40.3	29.7	27.9	23.8
United States	0.0	1.8	13.8	28.4	21.8	20.9
USSR/Russia	3.2	4.8	6.3	8.7	9.2	2.2

# Historical explanation

The current Chinese development is a reaction to the (colonial) expansion of European states and Japan **a restoration of China's global position**

Various attempts to catch up quickly **in the 50sd and 60s resulted in further setbacks** such as the utopian-inspired "big jump"

After decades of civil war, and limited successes or further setbacks and turmoil in the first 30 years of the People's Republic, the **last 4 decades have been a real catching-up process**

By further oscillations: to a realistic course











Historically:

„inward colonisation“ =labour intensive agriculture

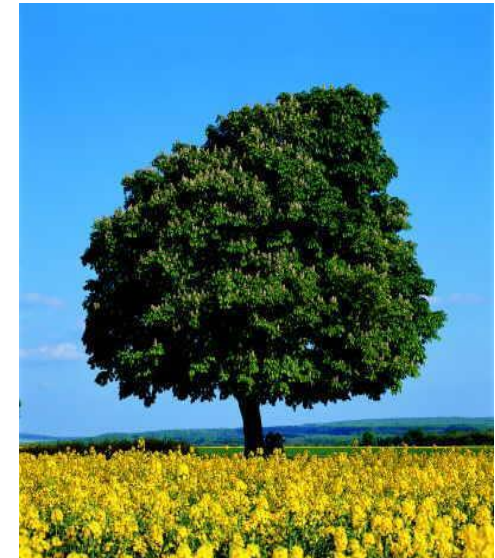
Mark Elvin: explanations why an industrial revolution happened in Europe but not in China, despite China was much earlier much more advanced: “**High equilibrium trap**”.

- “efficiency” was rather high,
- labour abundantly
- “need” or “incentive” for a fundamental transformation rather low

## „Inward colonisation“ =labour intensive agriculture

### **SOIL** specifically under pressure in China

- Desertification
- Erosion – Loess!
- Losses because of urbanisation
- Losses because of building of infrastructure
- Qualitative degradation by chemicals and immissions
- Deepening of groundwater levels
- Growing meat production need a multiple of land
- Risks for floods and droughts (climate change)



## **Historical Chinese characteristics in the field of transport 1**

历史上具有中国特色的交通运输领域 1

The unique **Chinese history** basically was **based (also) on solutions for transport (water)** which had been optimized (ELVIN)

独特的中国历史(也)基本上是基于解决交通运输(水运)的优化方案(ELVIN)

**Current tremendous** export performance in China **based also on systematic use of a special paradigm of transport, the container** with competitive advantages

目前，中国巨大的出口贸易也是基于大规模使用的特殊交通运输模式，具有竞争优势的集装箱。





## Historical Chinese characteristics in the field of transport 2

### 历史上具有中国特色的交通运输领域 2

Modern **containers are not really high tech** but grounded on the **intermodality** of transport - need for organization, regulation and coherence  
现代化的集装箱并非高科技，它多式联运为依托，需要组织、监管和连贯性。

High speed of construction of **high speed train routes** shows potentials  
飞速建设的高速列车路线显示出巨大潜力。

(Geographical) “**Chinese characteristics**“ of **higher density of population** potentially promote higher efficiency of public transport  
(地理学意义上)更高密度的人口这一“中国特色”可能促使公共交通的效率更高。



## Historical Chinese characteristics in the field of transport 3

### 历史上具有中国特色的交通运输领域 3

China has always been very **successful in disseminating innovation**.  
中国一直是非常成功的在传播创新。

China within long periods accumulated “**social capital**” to solve organizational societal problems for huge number of people  
中国长期以来积累“社会资本”用于解决大量人口的结构性问题。

Also currently innovative solutions for sustainable transport mainly are not technological but societal → China: **high potential to achieve new paradigms**

同样，可持续交通目前的创新性解决方案主要不是技术，而是社会□中国：具有实现新范式巨大潜力



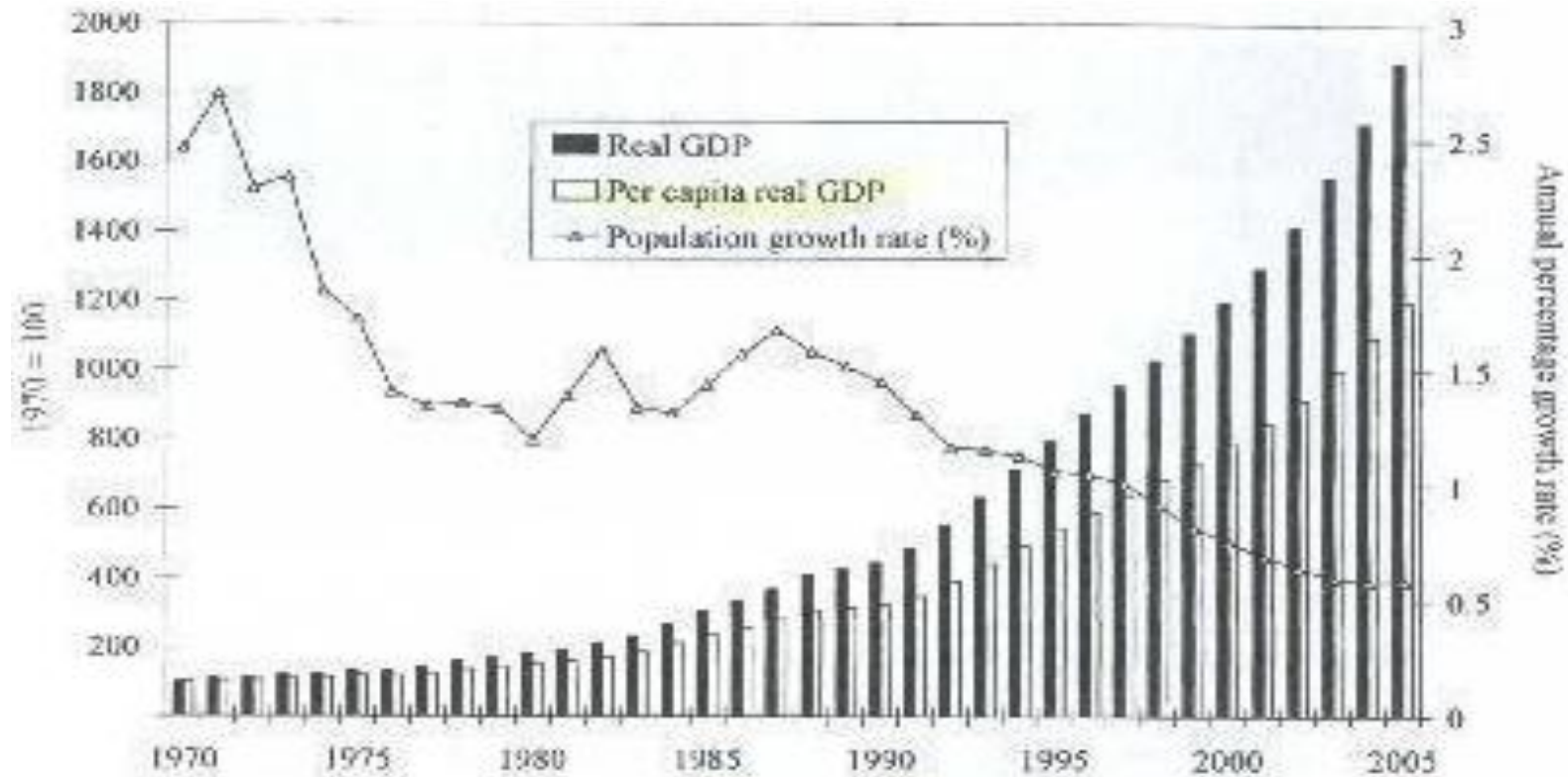
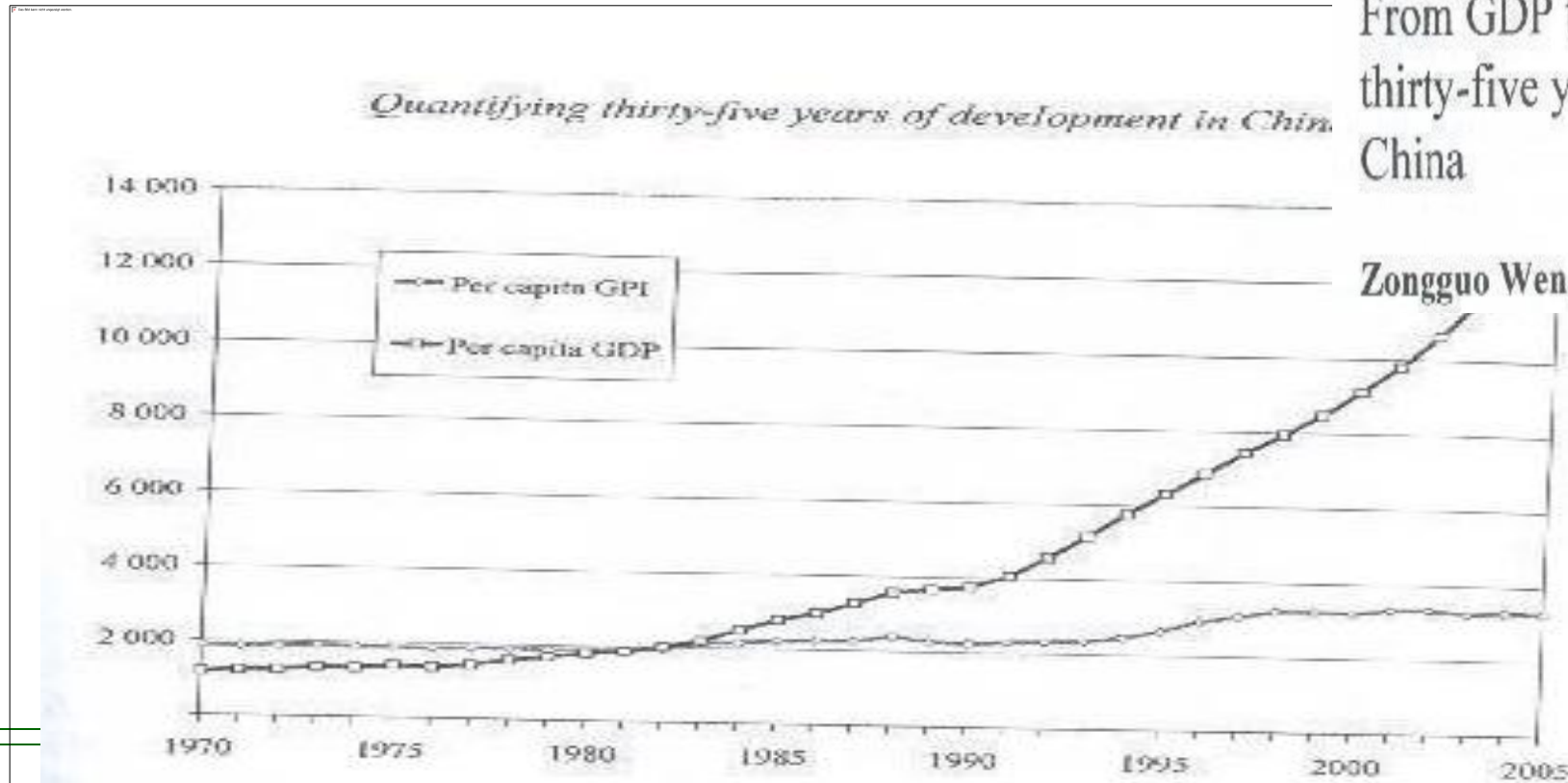


Figure 9.1 *Index of real GDP, per capita GDP, and population growth rate: China, 1970–2005*



## Using Genuine Progress Indicator (=alternative to GDP)



From GDP to GPI: quantifying  
thirty-five years of development in  
China

Zongguo Wen, Yan Yang, and Philip Lawn

Note: Valued in Chinese yuan at 2005 prices.

Figure 9.3 Per capita GPI versus per capita GDP: China, 1970–2005

## **“Ecological civilisation”- part of Chinese constitution**

The “ecological civilisation” is not only A Chinese dream; it is a global dream.

The building of an “ecological civilisation” in China is crucial for mankind.

In this context the way of Chinese urbanisation is very important

## Socio-ecological Flashlights on Eurasia



Fires in Russia  
俄罗斯的大火

Impacts of climate  
change in continental  
Central Asia much  
higher than average



Floods in Pakistan  
巴基斯坦的洪水

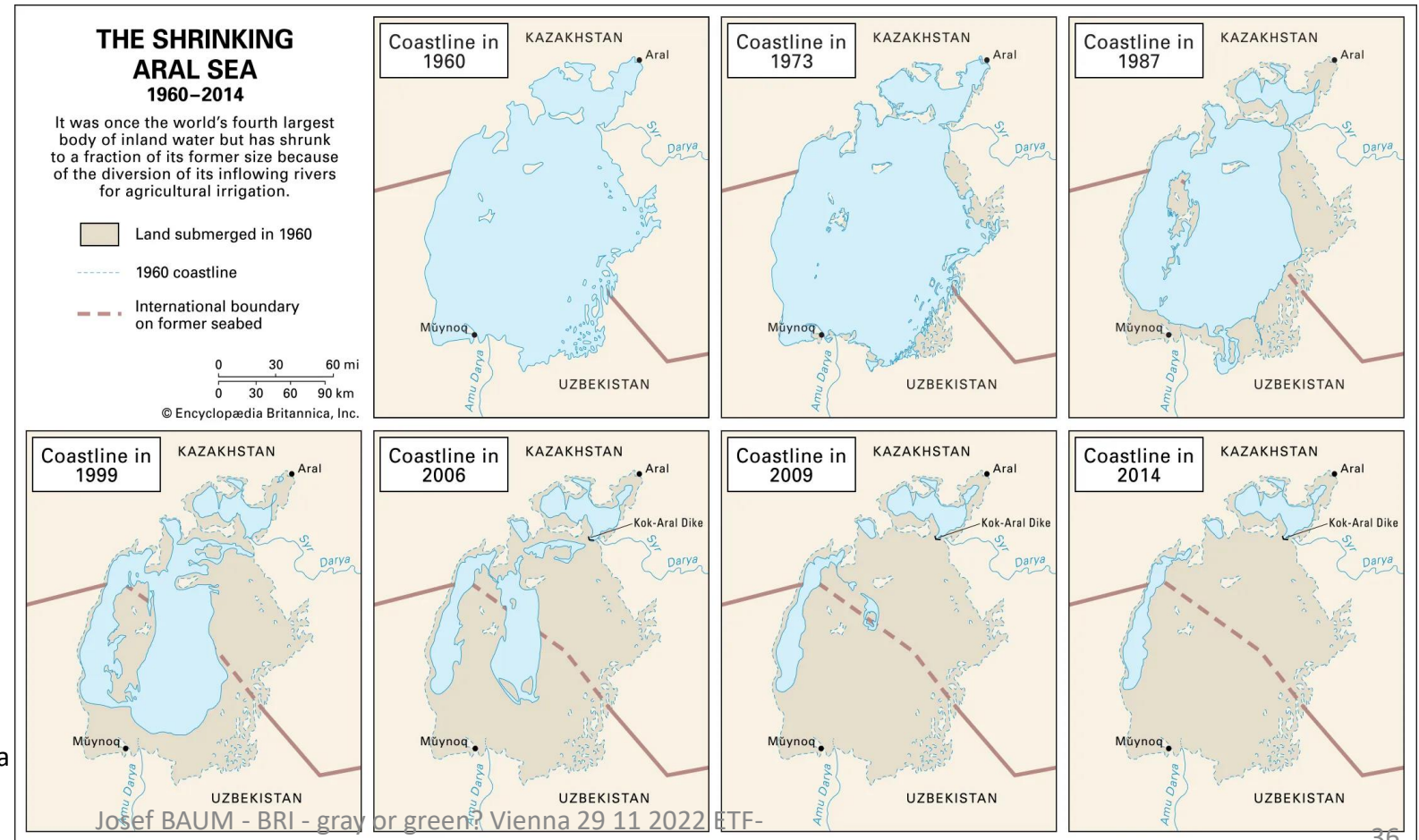
## Example Aral Sea

A vivid example are the events around the Aral Sea. This is among the largest ever man-made U environmental disasters: The Aral Sea has lost water over the last 50 years, mainly due to diversion of water for irrigation over 90% of the former water silted up, salted up and settled with the dust from the salty and dusty desert for decades. High inputs of artificial fertilizers, herbicides, pesticides and other pollutants, causing release around the Aral Sea in connection with the social conditions, the health of the population is severely affected



Source: Wiki

<https://www.britannica.com/place/Aral-Sea>



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Ministry of Environmental  
Protection (China) (May 2017):  
The Belt and Road Ecological  
and Environmental Cooperation Plan

Category	No	Project
Policy coordination	1	International High-level Dialogue on Ecological and Environmental Cooperation under the Framework of the Belt and Road
	2	International Union for Green Belt and Road Development
	3	Environmental Policy and Standard Coordination and Convergence
	4	Nuclear and Radiation Safety Management Exchanges
	5	China-ASEAN Partnership on Eco-friendly Cities
	6	Exchange and Cooperation for Compliance with Environmental Conventions
Facilities connectivity	7	Study on Green Interconnection
	8	Industrial Park Sewage Treatment Demonstration
	9	Environmental Impact Assessment and Strategic Environmental Assessment in Key Areas under the Framework of the Belt and Road
	10	Biodiversity Conservation Corridor Demonstration
Unimpeded trade	11	Hazardous Waste Management and Import and Export Regulation Cooperation
	12	Eco-Label Mutual Recognition
	13	Green Supply Chain Management Pilot
Financial integration	14	Study on Green Investment and Financing
	15	Study on Green Belt and Road Fund
People-to- people bonds	16	Green Silk Road Envoys Program
	17	Lancang-Mekong River Environmental Cooperation Platform
	18	China-Cambodia Environmental Cooperation Base
	19	Exchange and Cooperation of Non-governmental Environmental Organizations
Capacity building	20	Platform for Belt and Road Environmental Big Data Services
	21	Eco-Environmental Monitoring and Early Warning System Development
	22	Local Cooperation on Eco-Environmental Protection
	23	Industrial and Technological Cooperation Platform for Environmental Protection
	24	The Belt and Road Environmental Technology Exchange and Transfer Center (Shenzhen)
	25	China-ASEAN Environmental Technology and Industrial Cooperation Demonstration Bases

# Financial instruments

- BRI involves new multilateral **financial instruments**
- **AIIB** and others
- **Guidelines** for investments
- **Criteria for evaluations**
- **supervisions**



## Examples of Recent Policies

(slide based on Zhao Zhong)

Policies	Led by
Guidelines of Ecological Environment Protection for Overseas Investment and Cooperation Construction Projects (2022)	Min. of Ecol.& Environm.(MEE), Min. of Commerce (MOFCOM)
Green Investment Principles for the Belt and Road Initiative (2019)	China Banking and Insurance Regulatory Commission
Guidance on Promoting Green Belt and Road (2017)	MEE, Min. of Foreign Aff. (MFA)(, NDRC & MOFCOM
Belt and Road Ecological and Environmental Cooperation Plan (2017)	MEE
Administrative Measures for Enterprise Outbound Investment (order no. 20)	MOFCOM
Further Guiding and Regulating the Outbound Investment Direction (2017)	MFA, NDRC, (People's Bank of China) PBOC & MOFCOM
Interim Measures for the Supervision and Administration of Overseas Investment of Central Enterprises (2017)	(State-owned Assets Supervision and Administration Commission of the State Council)

Chinese President Xi Jinping made a announcement in front of the UN General Assembly in **September 2021**:  
**China will stop building new coal-fired power plants abroad**, and would instead support other countries in developing green and low-carbon energy.





# China is THE player at renewable energies

- **PV**

China's solar PV manufacturing currently accounts for about 71 per cent of the world's total capacity.

Wind

- Similar at **solar heat, wind, batteries** (for electric vehicles)....

# BRI- green institutions

- BRI International Green Development Coalition (BRIGC)
- BRI Green Development Institute

Eric **Solheim** (Norway) president (former Norwegian Minister of International Development and Minister of the Environment, former Under-Secretary-General of the UN)

- BRI Green Supply Chain Index
- Traffic Light System for financial institutions and developers

# Labour law and BRI

- National regulation – BRI recommendations
- Enforcement ?
- Organisation?
- Dialogue!

# No solution for ecological issues without checking social issues

- Uncompared successes in reduction of poverty in China
- Relatively new strategy in China : SHARED WEALTH
- BRI: contribution to poverty reduction by modernization in emerging countries
- Contribution to stabilisation in sensible regions (eg Afghanistan)

# Will the New Silk Road be **grey** or **green**?

**Remains an open question**

**- it depends - also on us**

**Let's realize WIN-WIN-strategies**



# China's arms build up?

Positive contrast to former Soviet Union: **NO** engagment in arm's race

Military strength US/China: ~10 to 1

But **tolerated „nationalist“ fraction** ( e. g. „Global Times). Could maybe gain influence

**Questionable proceeding in the South China Sea**