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HOW INFRASTRUCTURE  
IS SHAPING THE WORLD

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A  
CRITICAL  
INTRODUCTION  
TO **INFRASTRUCTURE**  
MEGA-CORRIDORS

## C R E D I T S

**Counter Balance**

is a European coalition of 9 development and environmental NGOs, whose mission is to make European public finance a key driver of the transition towards socially and environmentally sustainable and equitable societies. The coalition has extensive experience working on development finance and the international financial institutions as well as campaigning to prevent negative impacts resulting from major infrastructure projects.

**Counter Balance** Challenging Public Investment Banks

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**IN THIS CONTEXT,**

Counter Balance has explored in recent years the new wave of large-scale infrastructure projects being financed all over the world, seeking to understand the main drivers behind the new “global infrastructure agenda”, “what are the risks it entails?” and how to challenge it. As part of this work on infrastructure financing, specific attention has been paid to “mega-corridors” promoted by financial institutions and numerous governments. This report, based on a research undertaken by Nick Hildyard from the Corner House, is a first step in analysing the drivers behind these “mega-corridors” and informing a wider public of the challenges related to them.



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# WE LIVE IN AN AGE OF WHAT MIGHT BE TERMED “EXTREME INFRASTRUCTURE”.

## EXTREME

(perhaps “extremist” would be a better word?) not just because of the scale of the infrastructure – roads, railways, inter-basin water transfers, ports, pipelines, industrial zones and urban growth – that is planned across the globe.

## EXTREME

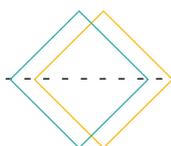
because it is intended to enable extreme extraction (opening up oil and mineral extraction in areas previously considered unexploitable) and extreme production (with capital free to move wherever labour is cheapest and most easily exploited).

## EXTREME

because it depends on extreme finance - in the forms of complex derivative products, the development of new, highly risky asset classes and the promotion of public private partnerships.

## AND EXTREME

because it can only operate through extreme politics involving top-down, elitist forms of planning and implementation that are profoundly undemocratic.



◆ The most visible manifestation of this extreme infrastructure and the capital-friendly “tradespaces”<sup>1</sup> it seeks to create are “**Mega-corridors**”.

This report starts by exploring the drivers behind the creation of infrastructure mega-corridors, placing them in a global and structural context.

A second section then seeks to identify the implications and risks associated with the mega corridor agenda.

We hope that this report will assist in better understanding the influences behind the push for mega corridors, and therefore help in building an effective challenge by those concerned about the trajectory of extreme infrastructure.

Finally, in an annex to the report, we will present a case study of corridors in Central Asia - the CAREC programme – illustrating the main dynamics identified earlier in the report.

# GLOSSARY

## ASSET CLASS

An asset class is a group of securities whose risk profile is held to be uncorrelated to that of other assets. Infrastructure is increasingly be viewed as such an asset class, with new funds now being developed to enable investors to invest directly in infrastructure projects or indirectly through infrastructure-related companies.

## CAREC

Central Asian Regional Economic Cooperation programme

## ECONOMIC CORRIDOR

Road and rail networks along people and capital are deliberately concentrated to create urban and industrial zones in order to increase the “density” of economic activity and exchange.

## FINANCIALISATION OF INFRASTRUCTURE

The increasing use of financial markets (rather than tax revenues and loans from public development institutions) to raise funds for infrastructure.

## TRADESCAPES

Cross border regions, created through trade agreements, logistics technologies and road, rail and other transport infrastructure, through which goods and services are able to move freely.

## MEGA-CORRIDORS

Inter-regional (and even inter-continental) road, rail and other transport infrastructure, linking major production and resource extraction centres with major consumer centres.

## ONE BELT ONE ROAD

Chinese infrastructure development programme, officially launched in 2013, that is intended to create a network of free trade areas connected by both terrestrial and marine infrastructure corridors stretching from the Pacific to the Baltic Sea. Now renamed “Belt and Road Initiative”.

## TRANSPORT CORRIDOR

Road and rail networks intended to connect centres of production and points of consumption.

## TRANS-EUROPEAN TRANSPORT NETWORK

A planned set of road, rail, air and water transport networks in the European Union.

## PUBLIC PRIVATE PARTNERSHIPS

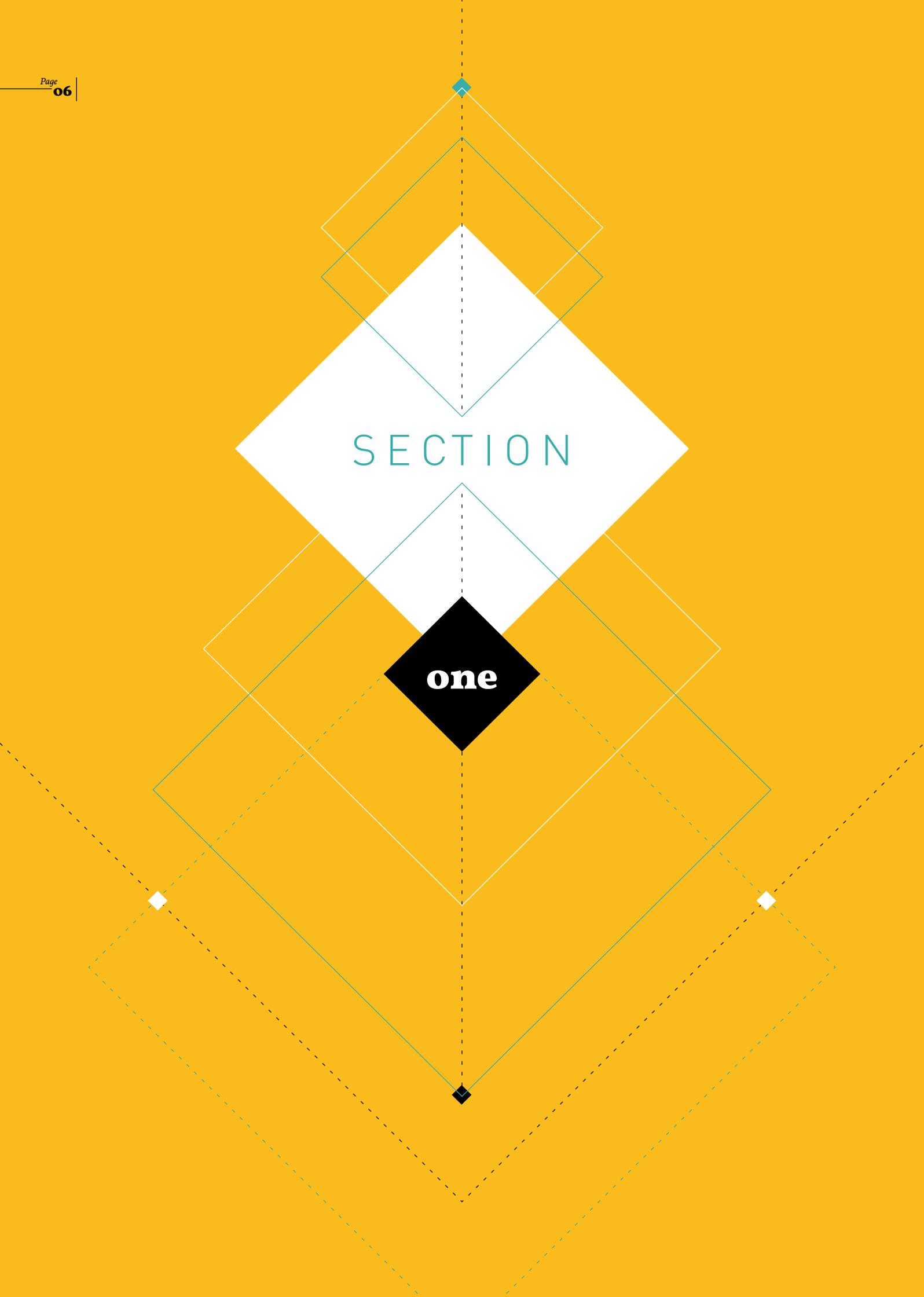
A ‘Public Private Partnership’ (PPP) is a type of contract under which private companies build and operate public services and infrastructure but where much of the financial risk is guaranteed by the public.

## NAFTA

North American Free Trade Agreement

SECTION

**one**





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## MEGA - CORRIDORS IN CONTEXT

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Infrastructure corridors are not new.

But the plans that are now on the drawing board are on a scale as yet unimagined – hence explaining the growing use of the term “mega-corridors”.

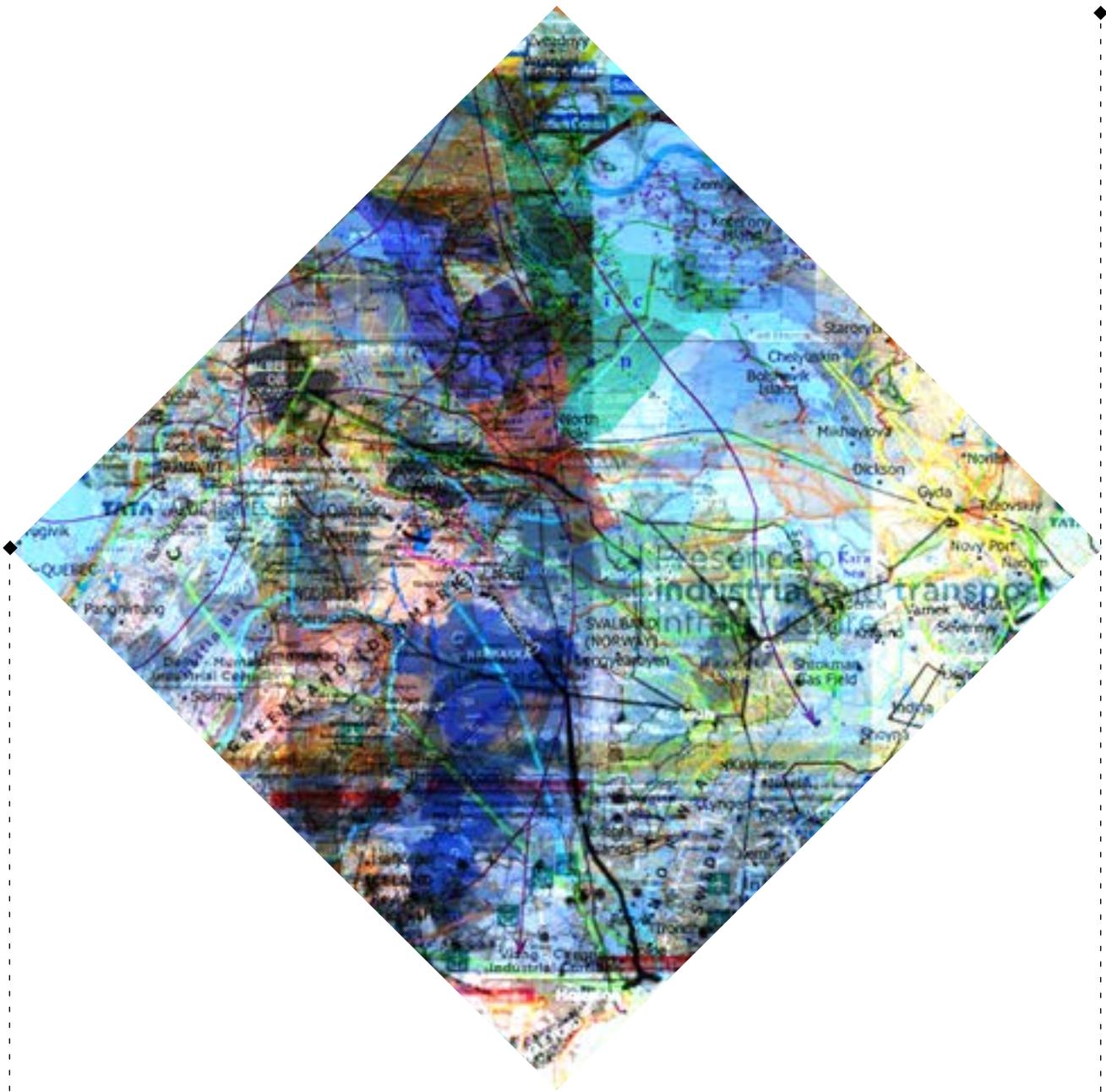
No continent (apart from Antarctica) is excluded. From Africa to Asia and the Arctic to South America, infrastructure masterplans have been drawn to reconfigure whole land masses (and the seas connecting them) into ‘production and distribution hubs’, ‘transit zones’, ‘development corridors’, ‘export zones’, ‘spatial development initiatives’, ‘interconnectors’ and ‘intermodal logistics terminals’.

Hundreds of Millions of people will be affected, shifted to make way for roads, ports, trains and airports or transformed into pools of cheap labour for the mines, plantations and factories that the corridors will service.

Some of the plans are national in scale, others regional and still others continent-wide or near-global.

## THE PLANNERS' MAPS

The following maps<sup>2</sup>, which include planned transport corridors, give a snapshot of what is currently envisaged.



## Africa

In Africa,

over 30 corridors have been initiated, principally to enable the extraction of agricultural produce and minerals. The majority are 'anchored' around mining projects but many have ancillary agricultural corridors or tourism developments as secondary offshoots. In southern Africa, a race is on to develop the shortest corridor routes to the sea from Zambia's copper belt province and the Democratic Republic of the Congo's mineral-rich Katanga province. Corridors serving iron ore, copper, coal, nickel and other mines are also planned, for example, in northern and central Mozambique, Botswana, Ghana, Liberia and Sierra Leone.



>>> CREDIT <<<

<http://www.paragkhanna.com/home/2016/4/18/these-maps-show-how-vast-new-infrastructure-is-bringing-the-world-together>

## Latin America

*No less ambitious plans are on the drawing board for South America.*

*Some 579 projects, costing an estimated \$163 billion, have been identified, of which 89 per cent involve roads, airports, ports, inland waterways and 'multimodal' transport schemes, 9 per cent energy projects and the rest communications infrastructure. Of these, 107 have been completed and 169 are under construction: the rest are still at the planning stage. A list of priority projects published in 2016 includes the construction or upgrading of 8000 kilometres of roads, 7000 kilometres of railways, four river ports and 8,500 kilometres of navigable waterways.<sup>3</sup>*



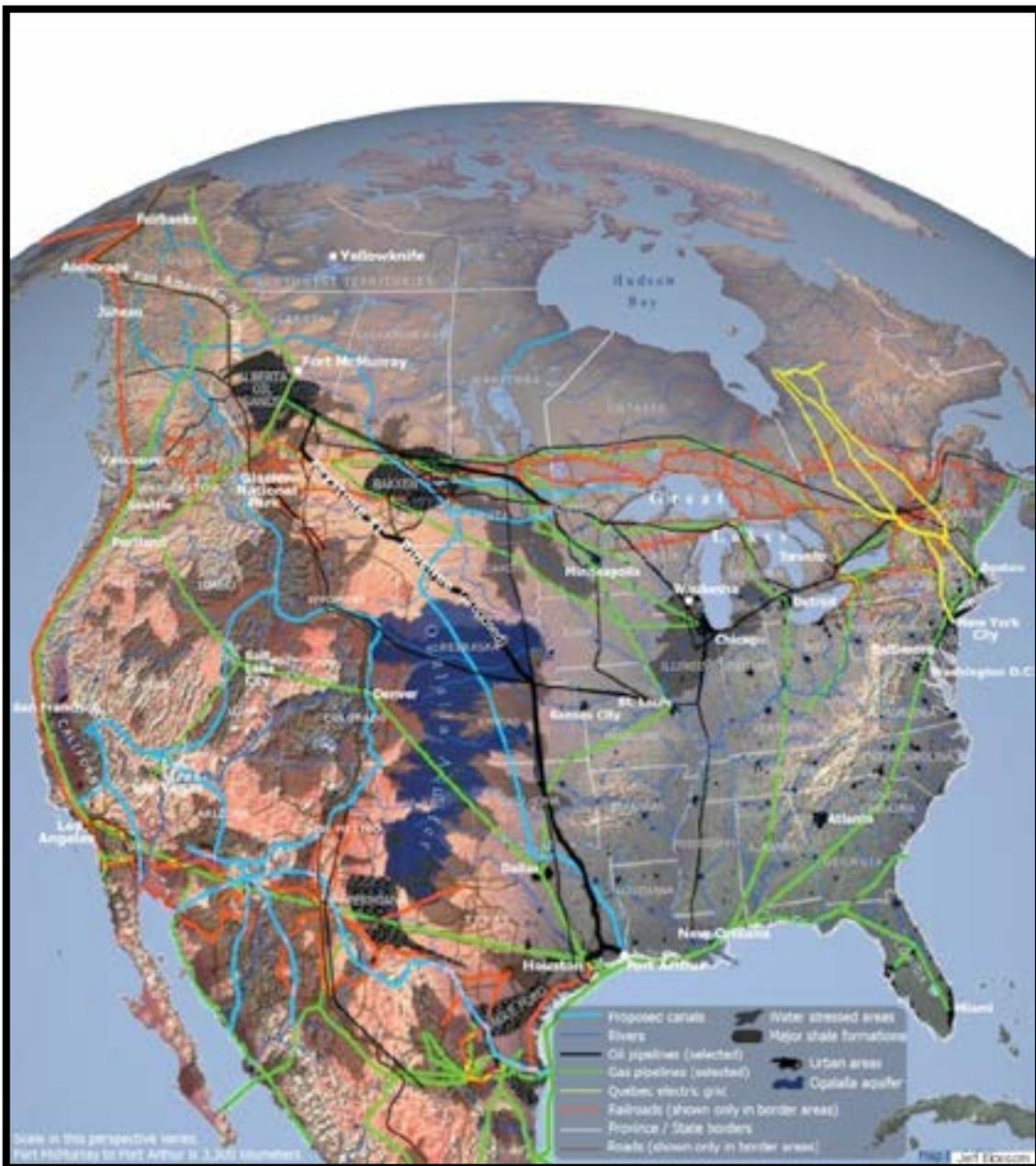
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## North America

*For North America,  
there are "NAFTA"\* corridors to connect  
Canada to Mexico and water transfer schemes and canals to bring  
water to the water-dry South West of the USA.  
Plus, of course, a rash of oil and gas pipelines,  
as well as major highways.*

\*NAFTA is the name of the Free-Trade Agreement between the USA and Mexico



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<https://www.paragkhanna.com/home/2016/4/18/these-maps-show-how-vast-new-infrastructure-is-bringing-the-world-together>

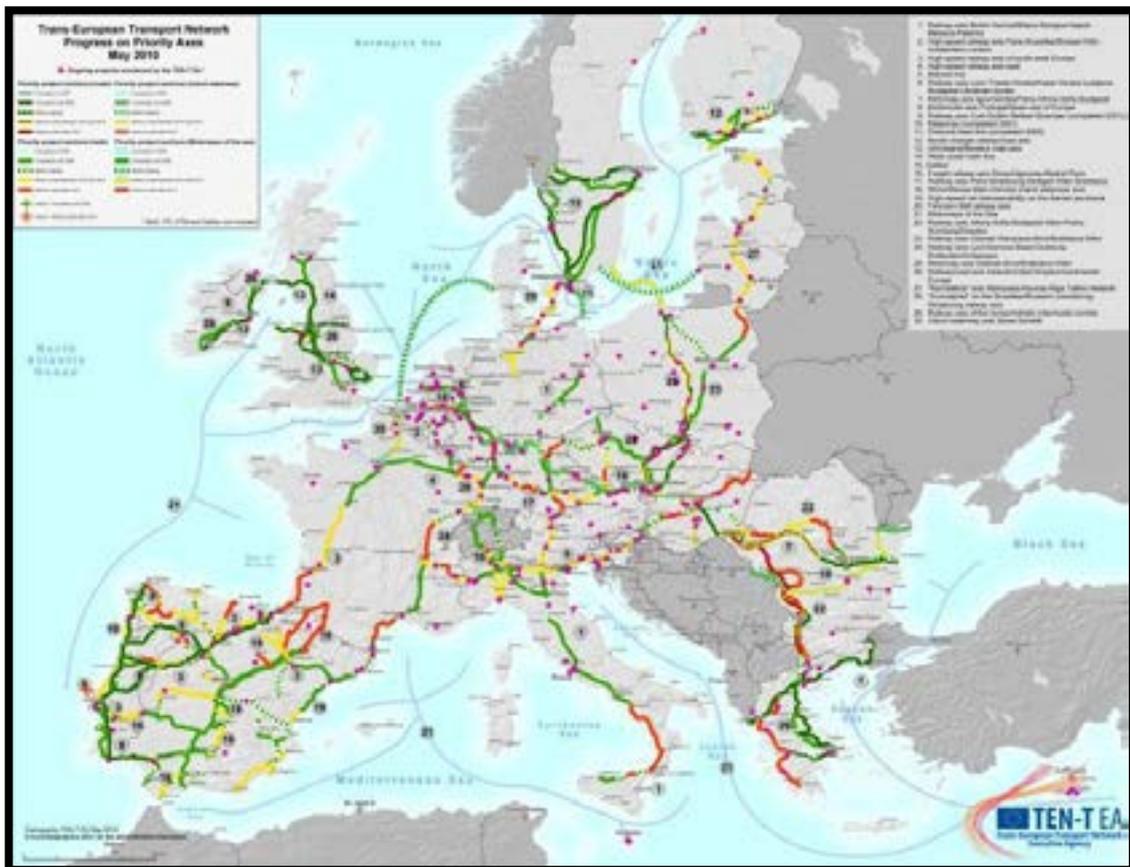
# The Arctic

*The Arctic  
too is slated for development,  
with marine corridors and railways planned  
as the polar ice recedes due to  
climate change.*



## Western Europe

*In Europe,  
the European Union has been building  
infrastructure corridors since the 1990s under its  
Trans-European Transport Network (TEN-T) programme.  
Not shown on this map<sup>4</sup> are planned interconnecting canals  
and waterways, electricity corridors and oil  
and gas pipelines.*



## Eurasia<sup>5</sup>

*And just as the backbone connects to the neck bone, the European Union corridors are intended to connect to Eurasian corridors and beyond.*



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<http://www.paragkhanna.com/home/2016/4/18/these-maps-show-how-vast-new-infrastructure-is-bringing-the-world-together>

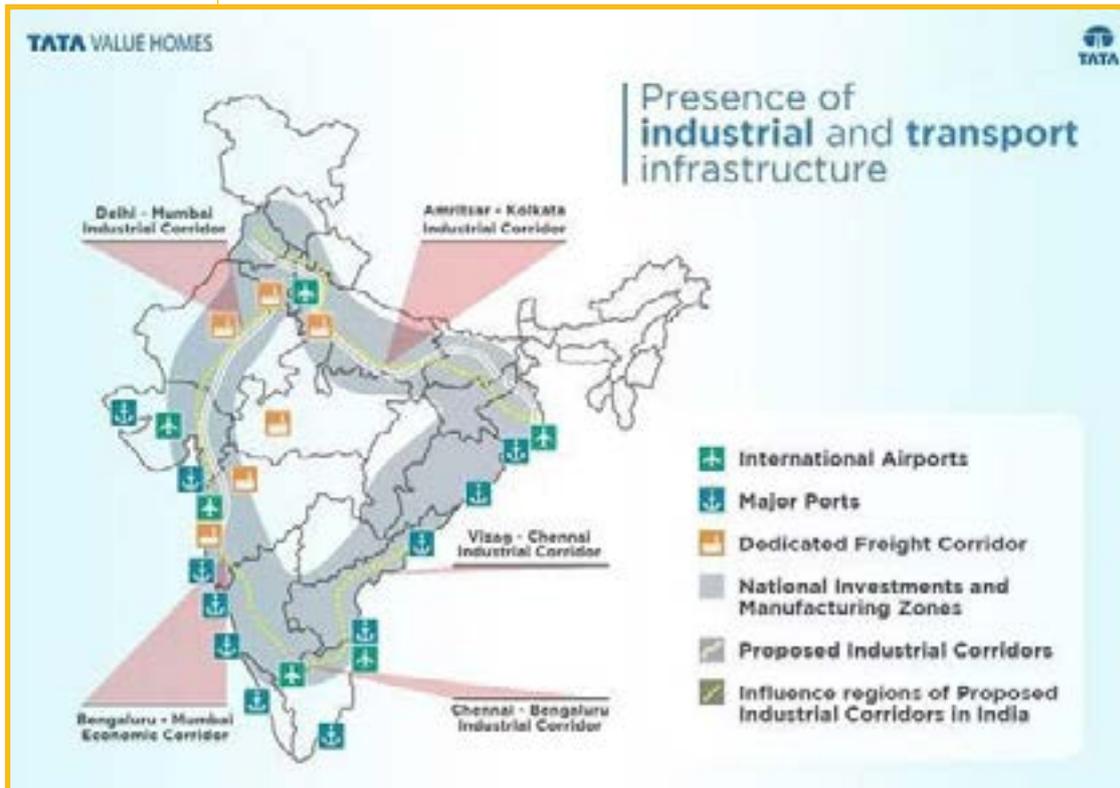


◆ In **INDIA**,

a vast infrastructure programme is underway to address what consultants McKinsey call India's 'waste in logistics'.

Seven dedicated freight train corridors are planned or under construction; and multiple projects are being implemented to increase the capacity of the country's twelve major ports whose throughput of iron ore, coal and containers is expected to have increased by 146 per cent, 225 per cent and 818 per cent respectively between 2007 and 2026<sup>6</sup>.

Five industrial development corridors (each with 'nodal' Smart Cities and core industrial hubs) are also being developed, including the Amritsar-Kolkata Industrial Corridor, the Bengaluru-Mumbai Economic Corridor, the Chennai-Bengaluru Industrial Corridor and the Delhi-Mumbai Industrial Corridor.



Of these corridors, the Delhi-Mumbai Industrial Corridor (DMIC) is billed as the largest single infrastructure project in the world.

Stretching over thousands of square kilometres, it would consist of a high-speed railway line, exclusively for freight, to India's largest container port, near Mumbai; twenty-three manufacturing centres; six airports; two power plants; a six-lane highway; and twenty-four new Smart Cities, each planned to house three million people.<sup>7</sup>

The objective is to expand India's manufacturing and services base and develop DMIC as a 'Global Manufacturing and Trading Hub'<sup>8</sup>.

Approximately 180 million people will be affected, many of whom are likely to be displaced, creating the potential for major conflicts<sup>9</sup>.

**◆ BELT AND ROAD INITIATIVE**

But the Big Daddy of the corridor plans is China's 'Belt and Road Initiative' (BRI) programme, previously known as One Belt One Road.

Officially launched in 2013, BRI embraces 60 countries (thus potentially half of the world) and is intended to create a network of free trade areas connected by both terrestrial and marine corridors stretching from the Pacific to the Baltic Sea.



>>> CREDIT <<<  
<http://english.gov.cn/r/Pub/GOV/p1/Content/Policies/Images/2015/04/20/belt-and-road-900.jpg>

BRI's 'belt' (officially the 'New Silk Road Economic Belt') consists of four land corridors that would collectively connect China to Central Asia, Russia, Europe, the Persian Gulf, Southeast Asia, South Asia and the Indian Ocean.

Its 'road' is in fact a marine corridor (the '21st-Century Maritime Silk Road') designed to go from China's coast to Europe via both the Indian Ocean and the South Pacific.

The corridor would involve not only shipping but, reportedly, deep seabed mining in the Indian Ocean.

## WHAT IS DRIVING THESE INFRASTRUCTURE PROGRAMMES?

Two factors are particularly pertinent:

1

### Extreme Extraction and Production

The first arises from the economies of scale that are required to extract the raw materials and access the cheap labour that capital relies on to expand.

Remoter sources of raw materials have only become commercially viable, for example, because bigger, more powerful and more efficient ships, trucks, trains, barges and cargo planes have reduced the costs of transport.

Until the 1950s, for example, the high costs of transporting iron ore (typically 60 per cent of production costs) meant that steel mills needed to be sited close to the point of iron ore extraction.

But by the 1960s, developments in shipping had made it competitive for the Japanese steel industry to transport huge volumes of iron ore from Australia over 5,000 miles away.

By the 1980s, bulk carriers had been developed that were twice the size of anything previously available, enabling Japan to import iron ore from the newly-developed Carajas mine in the Brazilian Amazon over 12,000 miles away 'more cheaply than US Steel could ship its iron ore across the Great Lakes'.<sup>10</sup>

But extreme extraction has major implications for infrastructure.

Bigger ships, trucks, planes and freight trains require the upgrading of roads, the strengthening of bridges, the deepening and widening of canals, the straightening of rivers, the lengthening of airport runways, and the construction of new warehousing facilities to handle the greater throughput of materials.

And each new economy of scale in transport infrastructure stimulates further economies of scale in extraction. One wave of innovation thus creates pressures for yet further innovation.

As bigger and faster forms of transport are developed and the costs of moving goods fall relative to other costs, the geographies of raw material extraction and production are reconfigured.

The choice of location for a factory, for example, no longer rests primarily on its proximity to sources of raw materials or consumers but embraces other considerations such as labour costs, the skills of the available workforce, the local tax regime or the regulatory environment.

It becomes more possible for capital to fragment production processes to an unprecedented degree and to move production further and further afield to areas that promise greater profitability, even though these may be often thousands of miles from the major points of consumption.

Extreme infrastructure thus both responds to and reinforces extreme extraction and extreme production, in turn demanding still more extreme infrastructure.

## 2

### The Production-Consumption Disconnect

The second factor – closely related to the first – is what financiers call “the production-consumption disconnect”. The problem is not new. Almost 150 years ago, Karl Marx revealed how the more that capital expands, the more it needs to improve infrastructure to ‘annihilate space by time’.

Today’s would-be global politburos, such as the World Bank, are well aware of the problem. Marx may not get a mention in the World Bank’s flagship 2009 World Development Report but ‘annihilating space by time’ is the leitmotif that runs through the report’s 380 pages.

The problem can be simply stated.

The distances between points of resource extraction, points of production and points of consumption are now huge, involving multiple journeys and multiple forms of transport. The minerals used in the manufacture of components for a computer, for example, are extracted from all over the globe. The components – perhaps as many as 4000 – are themselves manufactured by as many as 250 different suppliers in multiple countries.

But “the global consumers” with the money to buy the computer live far from the areas where resources are extracted and from where they are processed and

manufactured into consumer goods. This poses a major problem for capital, as fully recognised by the World Bank. The Bank is candid: future economic expansion will be critically dependent on truncating what it calls “economic distance”: that is distance as a measure of time and money.

Distance matters because time matters. And time matters because the faster commodities can be produced and exchanged, the greater the profits for individual firms and the sharper their competitive edge over rivals. The slightest delay in transporting components can thus cause major financial losses.

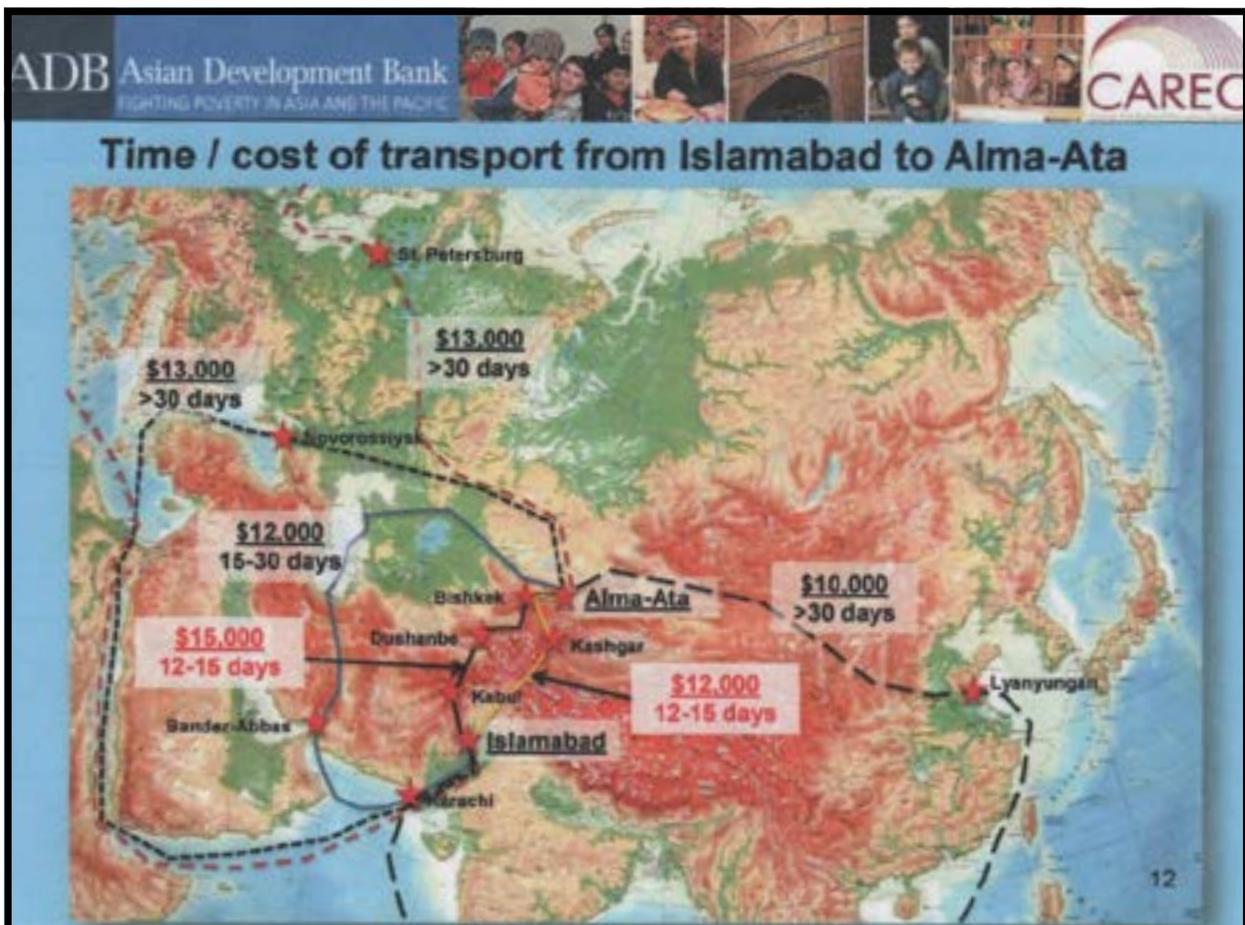
Similarly, the economies of scale that make mines such as Carajas in the Amazon commercially viable require ‘huge deposits of high-quality ore to fill ships on a regular basis and with minimum delay in harbour’.<sup>11</sup> In the calculus of global manufacturing chains, ‘every day in ocean travel

that a country is distant from the importer reduces the probability of sourcing manufactured goods from that country by 1 per cent’.<sup>12</sup>

Mega-corridors are seen as the solution. Constructing new roads, railways, airports and logistics hubs is viewed as key to speeding the circulation of commodities between sites of resource extraction, production and consumption – and thus increasing profits.

According to the United Nations Economic Commission for Africa, upgrading the road and rail links within the existing North-South corridor linking Dar es Salaam in Tanzania to Durban in South Africa through Zambia, Zimbabwe and Botswana would cut transport costs and transit times for traffic between Dar es Salaam and Lusaka (in Zambia) by about one-quarter.

For Central Asia, the potential savings are graphically illustrated by a slide from a presentation by the Asian Development Bank:



## MORE THAN JUST ROADS AND RAILWAYS

But extreme physical infrastructure – roads, railways, ports and the like – is only deemed to be a partial solution. The World Bank is clear that “trade facilitation” infrastructure – ports, airports, roads and railways – is not sufficient by itself to “shrink economic distance” on the scale required. Logistical discipline (including reducing border checks) and deregulation to free up the movement of goods are also demanded.

Countries are now increasingly policed for their logistics infrastructure. Since 2007, for example, the World Bank has published an annual Logistics Performance Index (LPI) that measures how countries ‘stack up’ against each other in terms of their ‘logistics “friendliness”’. Each recorded delay becomes a stick to beat countries into reducing tariffs, tearing up labour laws, privatising, and cutting “red tape”.

To achieve ‘integrated corridor management’, the corridors are being transformed into free trade zones, where tariffs are progressively removed – and with them the border controls, paperwork and other ‘man-made barriers’ that, in the words of the World Bank, ‘increase distance’ by slowing down the transport of goods. Laws protecting workers and the environment are often waived in such zones.

Planners also envisage specific legal regimes that would apply just to the corridors, especially where they are shared by a number of countries, in order to ensure ‘freedom of transit for cargo’ (a formulation that effectively claims rights for cargo) and uniform environmental and social legislation. The harmonisation of laws within transboundary corridors is often downwards, not upwards.

The aim is to create “**tradescap**es”<sup>13</sup> in which “streams of products services” are able to move freely “within and through communities” in geographical patterns that are subject to (and defined by) a neoliberal “matrix or ‘culture’ of trade agreements and treaties, statutes, delegated legislation, and custom that govern and guide trading relationships, institutions, and structures”.<sup>14</sup>

Critically, the desired trade corridors are not viewed as the road and railway link – the physical infrastructure projects - along which the “streams of product services” pass; rather it is the streams of product services themselves that constitute the corridor. Through the imposition of new “logistics-based” and “just-in-time” supply chain systems, production has “spilled out of the factory” to encompass transportation itself.<sup>15</sup>



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## RE - ENGINEERING ECONOMIC GEOGRAPHY

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To channel and organise these “streams of product services” so as to maximise profit, economic activity is being re-engineered on a continental scale.

The plan is to “agglomerate” cheap labour, consumers and investment along specific routes by “clustering” specific economic activities into dedicated mining, agribusiness, tourism, finance, IT and other “hubs”. The aim is to enhance the competitive advantage of specific industries by concentrating them geographically, thus enabling them to benefit from shared economies of scale, pools of specialised labour and mutually reinforcing institutional support.<sup>16</sup>

The roads and railways that link these zoned clusters of production are intended primarily to speed supply chain connections and bring goods to the 44 cities where the bulk of the ‘global consuming class’ are predicted to be living by 2025.<sup>17</sup>

The proposed re-engineering of economic geography thus marks a decisive departure from post-war development policies based on achieving ‘spatially-balanced’ development.

Instead, it is acknowledged that “some [areas] must get rich before others”<sup>18</sup>; and that this will require top-down centralised planning, led by the private sector, to move people to where capital needs them.

In words that could come out of a Stalinist-era play book, the World Bank insists: “No country has grown to riches without changing the geographic distribution of its people”.<sup>19</sup>

Millions of people will be moved – forced to do so because markets and employment opportunities will be increasingly concentrated in cities and their linking corridors.

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## FROM EXTREME INFRASTRUCTURE TO EXTREME FINANCE <sup>20</sup>

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But the extreme infrastructure needed to respond to economies of scale, the off-shoring of manufacturing, the extraction of oil, gas and minerals from remoter and remoter areas, the growth of a 'global consuming class' and just-in-time delivery systems is costly – necessitating “extreme finance”.

Many of the individual infrastructure projects, and certainly the wider schemes as a totality, are simply beyond the resources that can be raised through historical forms of infrastructure finance.

Globally, \$50–70 trillion will need to be raised between now and 2030, of which about 60 per cent would be for infrastructure in emerging countries.<sup>21</sup> The shortfall in the transport sector alone is an estimated \$260 billion every year between now and 2030. The shortfalls in the energy sector are even higher – some \$530 billion a year.<sup>22</sup>

Such figures are what promoters of mega-corridors and global institutions like the G20 call “the infrastructure gap”. It is important to point out that this infrastructure gap does not focus solely on bringing light and water to deprived communities, but is based on a much more commercial objective – ensuring accelerated extraction, production and consumption along infrastructure mega-corridors.

A study for the 2015 meeting of the leaders of the G20 was blunt: ‘Traditional funding sources will not be sufficient to meet these financing gaps’<sup>23</sup>.

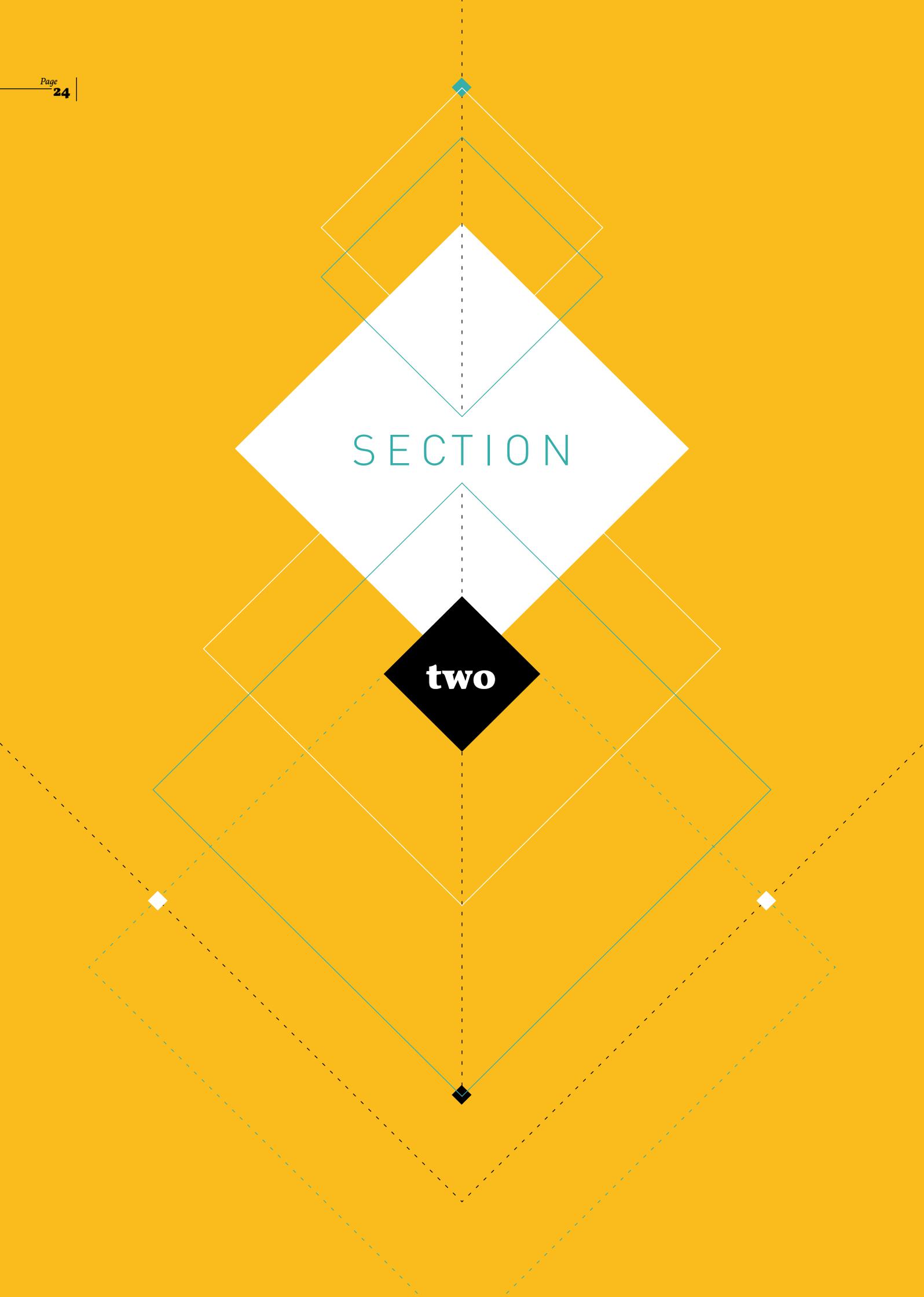
Individual governments don't have the money. The Multilateral Development Banks don't have the money. China does not have the money. The US does not have the money. The European Union does not have the money.

Capital has few options but to attempt to expand the pool of finance on which it can draw. Public finance through state institutions will still be critical – but the aim is to use it to attract additional funds from private investors. Hence the re-engineering of infrastructure finance to make it more attractive to private investors through government-backed guaranteed income streams, compensation against new legislation that might affect profits and the like.

And hence the push for Public-Private Partnerships (PPPs - which are central to all of the proposed mega-corridors) to provide both an enticement to private investors and the foundation stone on which other extractive forms of finance can be built. Here the role of the State is to guarantee safe returns to private investors.

The idea behind the new financing paradigm is that infrastructure is packaged to attract long-term institutional investors, such as pension, insurance, mutual funds and sovereign wealth funds. In this paradigm, the government would shoulder most of the risk in the early stages of design and construction and the institutional investors would take the revenue stream over decades.

A model that transmits the user fees and tolls for infrastructure to the pensioners of Japan, Europe and North America should be challenged. Not only are the pensioners put at risk because infrastructure investment is already threatening to become a bubble that could burst; but the notion that Northern pensioners should be supported by outflows from poorer developing countries is surely wrong.



SECTION

**two**

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## IMPLICATIONS AND RISKS OF MEGA-CORRIDORS

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◆ The following section seeks to provide some initial insights into the environmental and social impacts of Mega-Corridors. The list of concerns is by no means exhaustive: the new “Global Infrastructure Agenda” is a multi-faceted phenomenon and new elements are constantly emerging. The list should therefore be viewed as a work in progress – a tentative attempt to cluster some of the issues of concern that are emerging.

◆

### MEGA-CORRIDORS AND TRADESCAPES REPRESENT A NEW WAVE OF GLOBALIZATION WHICH IS **PROFOUNDLY ANTI-DEMOCRATIC**:

Promoters of mega-corridors – mostly governments, financial institutions and trans-national companies – are planning to re-engineer the world’s economy through processes and forums from which the public is largely excluded. Social movements, for instance, have little or no voice in the discussions within the G20 on infrastructure development – and plans are being promoted without any real accountability to citizens. Although, in some instances, the public is consulted on the implementation of specific projects, the framework for such projects is being determined in forums which are dominated by the private sector and where the general public has no voice.

Indeed, our analysis shows that the push for mega corridors is primarily a corporate-driven agenda. If, as intended by the World Bank and others, infrastructure evolves into an asset class capable of providing yield-hungry investors with the returns that they seek, it will likely leave a handful of fund managers increasingly determining what gets financed and what does not.<sup>24</sup>

## MEGA-CORRIDORS AND THE DEVELOPMENT MODEL THEY PROMOTE ARE LIKELY TO

### ENHANCE INEQUALITIES INSTEAD OF TACKLING THEM:

The corridors are intended to mobilise domestic resources for the purpose of development. But development for whom? And for what? A look at the different regional maps makes it clear that many of the corridors are centered around ports and free trade centers, reflecting the export-orientated nature of the planned development. Not only are the industries that are being promoted environmentally damaging - mining and agribusiness, for example - but the focus is on cheap labour areas. It will be industry in China and consumers in the West that primarily benefit.

In addition, as observed in the previous section, the proposed re-engineering of economic geography via mega-corridors marks a decisive departure from post-war development policies based on achieving 'spatially-balanced' development. This means that promoters of this agenda are explicit about ignoring continental, national or regional economic imbalances. They are not aiming at improving the lives of the many, but rather to favour specific regions and geographic areas by "agglomerating" cheap labour and capital. As Antonio Tricarico of the Italian NGO Re:Common comments: *"We are literally facing the risk of constructing a global apartheid regime for years to come, whereas a large part of human population will be segregated by mega-corridors, both physically and economically. Something hard to reverse in few years time if fully implemented as its elitist planners dream of"*.

Such "agglomeration" is likely to have massive impacts on regional inequalities. The stated objective is to tap into cheap labour reservoirs in order to develop streams of products and services. It is an agenda that risks aggravating poverty through the precariatization of workers, while benefiting only a small elite..

Moreover, the preferred means of financing corridors – notably Public Private Partnerships (PPPs) – are themselves likely to exacerbate inequalities. The history of PPPs is history of privatized gains and socialized losses. One only need examine the World Bank's "Guidance on PPP Contractual Provisions" (2017) to see how risk is heaped upon governments, building up liabilities that, one day, may transform into huge debt burdens, at the expense of public expenditure on schools, housing and health.

## MEGA-CORRIDORS ARE THE NEW FRONTIER FOR THE DEREGULATION AND FREE TRADE AGENDA:

As the CAREC case study (see annex below) illustrates, mega-corridors and tradescapes involve more than just building roads and railways. Legal regimes to ease trade must also be constructed. These feature tax breaks for companies, the creation of offshore financial centers, deregulation and free trade agreements between governments promoting the corridors.

The direction of travel is illustrated by the financial centre being developed in Astana, the capital of Kazakhstan. The centre will operate under its own legal regime, derogated from national law and inspired from the British law, and will host an international arbitration centre which is expected to include foreign judges and arbitrators.

Critically, the legal regimes that are being constructed to build the new tradescapes are intended to “lock in” neoliberal, free market rules and regulations. The financial guarantees that are provided through Public Private Partnerships similarly serve to “lock in” forms of financing that are both favourable to the private sector and which enable the development of finance as a sector.<sup>25</sup>

## MEGA-CORRIDORS ARE THE CONTINUATION OF AN EXTRACTIVIST DEVELOPMENT MODEL THREATENING THE CLIMATE AND HUMAN RIGHTS:

The building of planned mega-corridors would also mean locking-in the current extractivist development model. This agenda entails important climate risks, as it is largely reliant on fossil fuels, mining and large-scale agribusiness. In this regard, it is fundamentally incoherent with the fight against climate change. Such an approach has significant implications for developing countries' choices over which development path to follow. Megacorridors fuel the competitive scramble for natural resources and corporate control of food production, therefore contributing to inequalities and environmental degradation. The mega-corridors being currently designed foster the global oil and gas markets and consequently further embed the fossil fuel-based economy. For governments who are signatories of the Paris Agreement, there is a clear incompatibility between their commitments to reduce fossil fuel emissions and the promotion of the new global infrastructure agenda of mega-corridors.

At the local level, the projects that make up the corridors will likely entail the same environmental and social impacts as previous large-scale infrastructure projects: lack of public consultation of affected communities, displacement of populations, human rights violations, increase of public debt, poor respect of labour rights, and so on. Given the scale of projects envisaged, such impacts are likely to be enormous. Moreover, the overt aim is to roll back many of the hard-won environmental, labour rights and other protections that have been won by social movements through years of struggle. Meanwhile, the rights of investors are locked in through trade and investment law and the investment provisions of PPP contracts.



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## C O N C L U S I O N

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Shedding light on the drivers behind the push for mega-corridors is an important step in challenging the underlying agenda and building alternative visions and approaches.

While extreme tradescapes signal the direction of travel that globalised forms of capital require if they are to expand, the ultimate trajectory will not be written in the maps and masterplans that are being drawn up or by the deliberations of intergovernmental meetings. It will be determined by the ways in which those plans interact with other agents, human and non-human, both now and in the future. There are already many and varied forms of resistance to tradescapes – though they may not be articulated as such. Attempts to establish clusters and to agglomerate labour inevitably bring clashes over land and other resources.

In India, where corridors will take over an estimated one quarter of agricultural land, those affected by individual corridors are organising to join forces through groupings such as the National Alliance of Peoples' Movements.

Within China's free trade zones, the squeezing of labour and the oppressive working conditions have sparked protests at Foxcom's factories and elsewhere. Similar protests have erupted in other countries.

Labour is also resisting the privatisation of ports in Greece, a move intimately connected to the transformation of Greece into a logistics hub for various corridors – which is inherent to the “logistics logic” that is driving extreme infrastructure. The privatisation of Piraeus port and the award of the operating concession to the Chinese company COSCO led to the mass sacking of workers and the introduction of oppressive new labour regimes.<sup>26</sup>

Indeed, the global infrastructure agenda is a trajectory that is fraught with vulnerabilities, not only due to resistance from those whose livelihoods do not depend on just-in-time delivery, but also because the extreme finance on which the project depends is currently struggling to entice the sums required. As such, the financing of “extreme infrastructure” is a potent arena of struggle. Opposition to public private partnerships (PPPs) and other elements of extreme finance are also growing globally, again creating space for exploiting a prime vulnerability in the planners' corridor plans: the need to expand the pool of available finance. This may offer scope for new alliances among those challenging corridors, “extreme energy” projects and other forms of extractivism. A challenge for civil society will be to create linkages between such social movements. Understanding the drivers behind corridors may hopefully assist in this task, not least by relating specific projects to the wider structural forces that lie behind the oppressions of nature and people.



## CASE STUDY: a set of emerging corridors in Central Asia –the Central Asian Regional Economic Cooperation (CAREC)

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The aim of this case study on the Central Asian Regional Economic Cooperation (CAREC) programme<sup>27</sup> is to understand better the strategies being pursued by promoters of corridors. In the case of the CAREC corridor programme this has involved years of organising by corridor promoters to build the political infrastructure to support and promote specific corridors; to raise the finance to build their physical components; and to put in place the legislative and other changes necessary to create the desired “tradespaces”.

Formally launched in 2001, CAREC is a partnership of 11 countries and six multilateral development institutions that aims to promote regional integration through infrastructure and trade facilitation.<sup>28</sup>

The 11 participating countries are: Afghanistan, Azerbaijan, the People’s Republic of China (PRC), Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.<sup>29</sup>

The Asian Development Bank (ADB) houses CAREC’s secretariat and was its main initiator. Other development institutions that are part of CAREC include the European Bank for Reconstruction and Development, the International Monetary Fund, the Islamic Development Bank, the United Nations Development Programme and the World Bank.

CAREC has been criticised for not having sufficient country buy-in and for a failure to establish linkages with existing national and regional plans. Its effectiveness has also been reportedly undermined by a lack of co-ordination amongst its members and institutional supporters.<sup>30</sup>

Nonetheless, CAREC has been critical in framing the discourse on Central Asian corridors and in sourcing the funding to get them started. EU institutions and member states have been active in promoting CAREC, primarily through the Asian Development Bank.

This section reviews the “fruits” of such organising, notably in shifting the trajectory of corridors from mere transport routes to “economic corridors”.

## FUNDING TO DATE

CAREC does not fund projects itself but acts as platform for generating funds. As of September 2016, CAREC had invested \$28.9 billion in three core areas: transport, energy and trade facilitation.<sup>31</sup> Of this figure, \$22.6 billion (78%) was in the transport sector, \$5.7 billion (20%) in the energy sector, and \$0.6 billion (2%) in trade facilitation". CAREC also financed a total of \$466 million in technical assistance programmes.<sup>32</sup>

Funding came primarily from national member states, local municipalities, bilateral aid agencies and from CAREC's six partner development institutions.<sup>33</sup>

As of 2016, the ADB had financed \$10.1 billion (35%) of the programme's total investment,<sup>34</sup> with CAREC governments financing 25.1%, World Bank 21.5%,

Islamic Development Bank 5.8%, European Bank for Reconstruction and Development 5.1%, and other development partners 7.0%.<sup>35</sup>

In the transport sector, CAREC projects have contributed to building (or improving) 809 kilometres of expressways or national highways.<sup>36</sup>

Significant projects supported by CAREC in the energy sector include a transmission line to export power from Turkmenistan to Pakistan; the proposed Turkmenistan–Afghanistan–Pakistan–India (TAPI) gas pipeline; and the development of a Central Asia–South Asia Regional Electricity Market.<sup>37</sup>

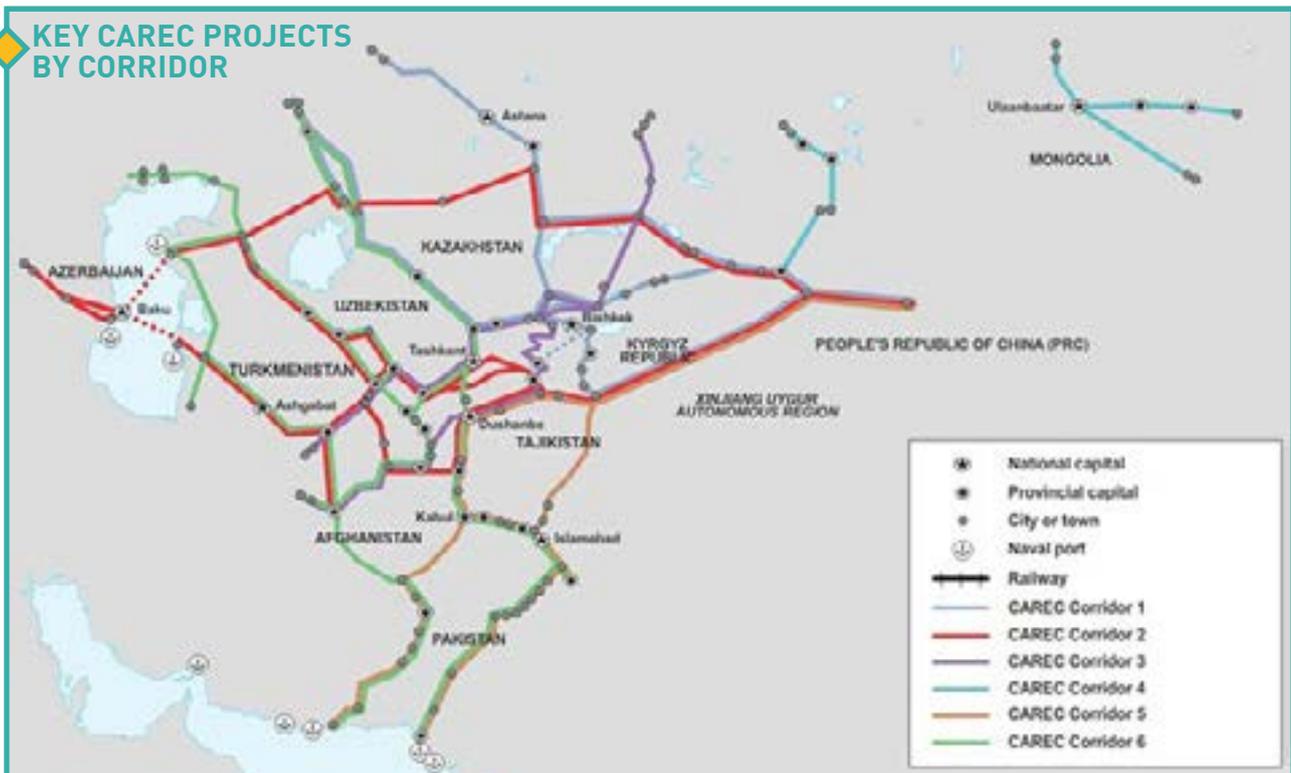
## CAREC'S CORRIDORS

CAREC's infrastructure programme focuses on the development of six major corridors. Each of the corridors is intended to improve the access of CAREC countries to "at least two large Eurasian markets" and to the warm-water ports of Karachi and Gwadar in Pakistan, thereby opening up "truly global trade

opportunities".<sup>38</sup> Under CAREC's current Transport and Trade Facilitation Strategy, all six transport corridors are to be brought up to international standards by 2017.<sup>39</sup>

◆ The section below presents 3 of those corridors.

### KEY CAREC PROJECTS BY CORRIDOR



## CORRIDOR 1

Europe–East Asia



>>> CREDIT <<<  
Asil Gezen, Central Asia Regional Economic Cooperation (CAREC) Transport Sector Strategy, TERA International Group, Inc, October 2007,  
<http://slideplayer.com/slide/710085>

Corridor 1 passes through three countries: the Peoples Republic of China, Kazakhstan, and the Kyrgyz Republic. It has 13,600 km of roads and 12,000 km of railways.<sup>40</sup> The corridor has three sub-corridors:

### CORRIDOR 1a

Primarily a rail corridor connecting Urumqi (China) to Astana (Kazakhstan) and onward to the Russian Federation.<sup>41</sup>

### CORRIDOR 1b

The 2,787 km road corridor runs from Korgas at the Chinese border to Zhaisan at the Russian Federation border via Almaty and Shymkent in Kazakhstan.<sup>42 43</sup> A special economic zone (SEZ) has been established in Khorgos-Eastern Gate, which includes a logistics and industrial zone and a railway station.<sup>44</sup>

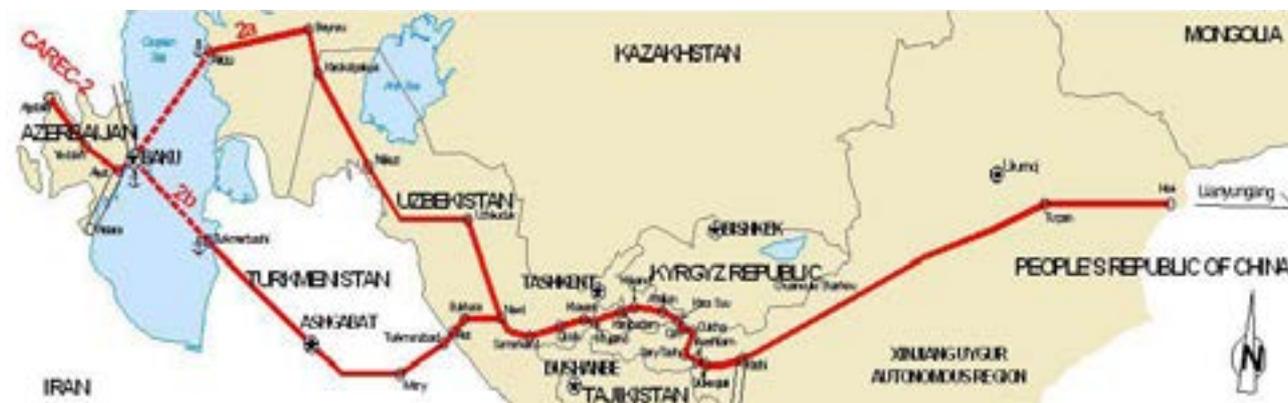
When announced, in 2008, its estimated cost was \$6.6 billion for a total length of 2,450 km.<sup>45</sup> Private investment through PPPs was expected to raise \$1.6 billion.<sup>46</sup>

### CORRIDOR 1c

The sub-corridor runs from Bishkek in the Kyrgyz Republic to Torugart at the PRC border.<sup>47 48</sup> The total cost of improving this segment of Corridor 1 has been estimated at \$300 million.<sup>49</sup>

## CORRIDOR 2

### *Mediterranean–East Asia*



>>> CREDIT <<<  
Asil Gezen, Central Asia Regional Economic Cooperation (CAREC) Transport Sector Strategy, TERA International Group, Inc., October 2007,  
<http://slideplayer.com/slide/710085>

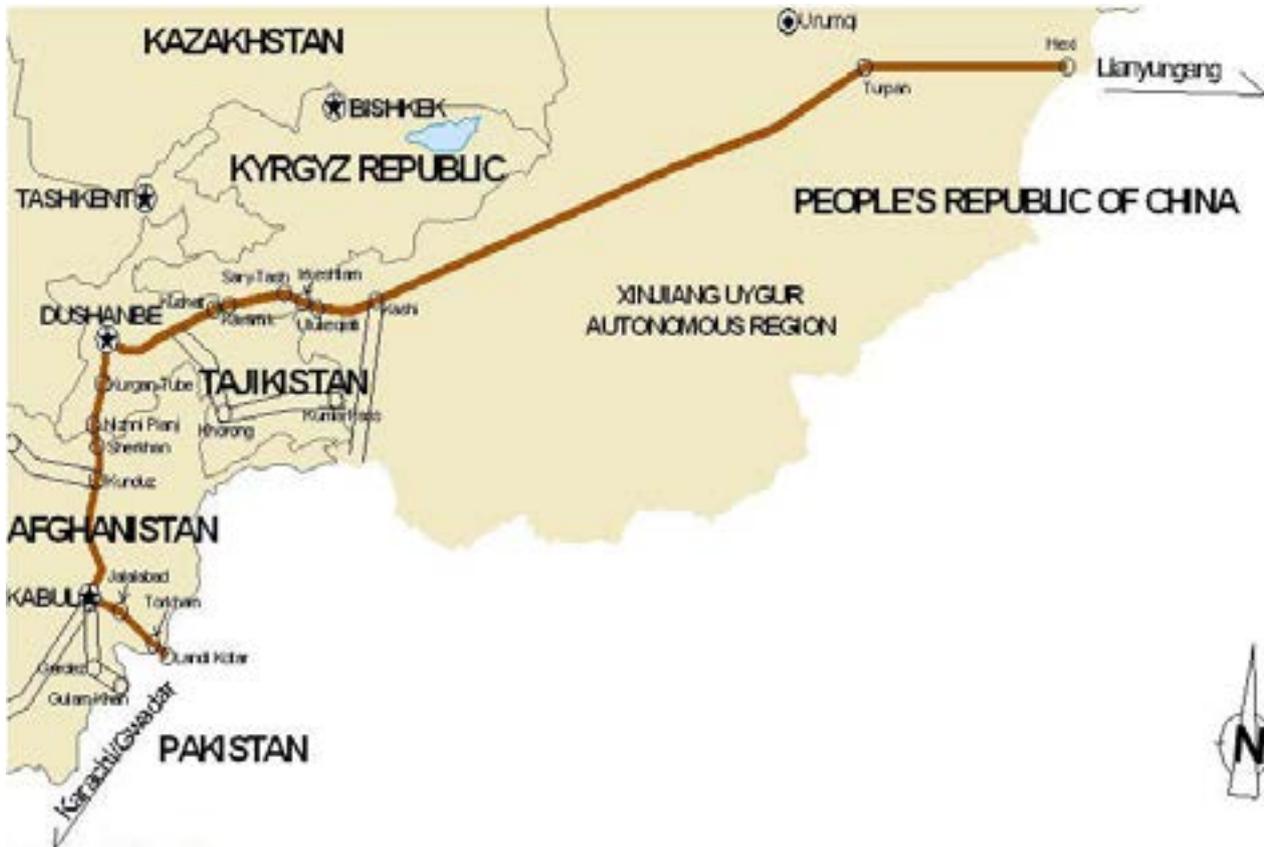
Corridor 2 connects East Asia to the Caucasus through both roads (9,900 km) and railways (9,700 km), and maritime transport routes across the Caspian Sea.<sup>50</sup>

It is divided into two main sub-corridors: a northern route which provides a road-rail corridor between the eastern and western regions of Kazakhstan; and a southern corridor which connects Afghanistan, Tajikistan, and Turkmenistan.<sup>51</sup>

Corridor 2 is envisaged as an important 'energy corridor', facilitating the transport of oil and gas from Azerbaijan, Kazakhstan, and Turkmenistan.<sup>52</sup>

## CORRIDOR 5

## East Asia–Middle East and South Asia



>>> CREDIT <<<  
Asil Gezen, Central Asia Regional Economic Cooperation (CAREC) Transport Sector Strategy, TERA International Group, Inc, October 2007,  
<http://slideplayer.com/slide/710085>

Corridor 5, involving 3,700 km of roads and 2,000 km of railways,<sup>53</sup> is intended to connect China, Tajikistan, Kyrgyz Republic and Afghanistan to Pakistan's sea port of Karachi.

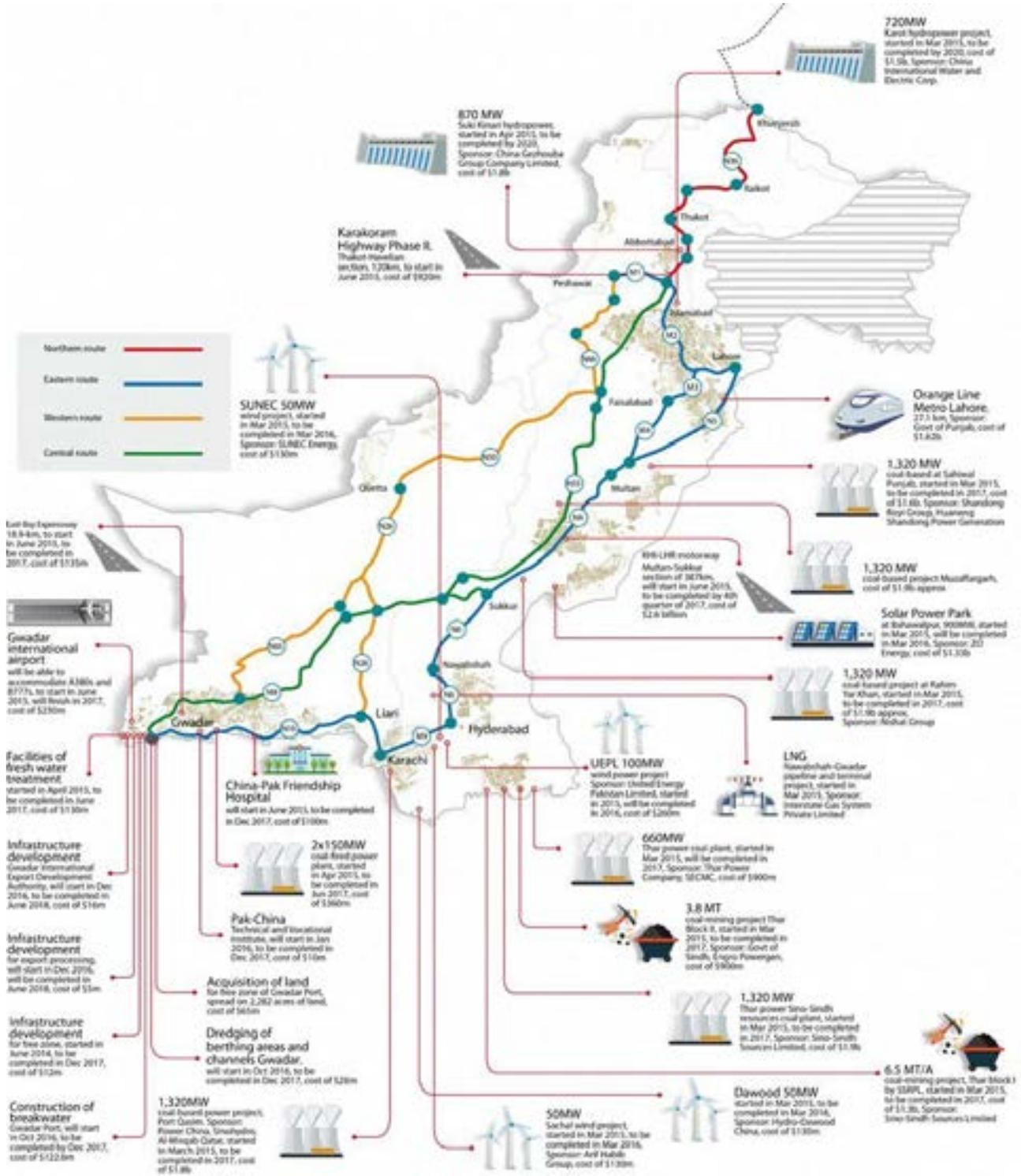
The Corridor was originally planned to end at the Pakistan border. However, after Pakistan became a partner in CAREC in 2010, the corridor has been extended to Pakistan's seaport at Karachi.

In Pakistan, the corridor is intended to complement the \$46 billion Chinese-funded China–Pakistan Economic Corridor, which will stretch 2,700 kilometers from Gwadar on the Arabian Sea to the Khunjerab Pass at the China–Pakistan border.<sup>54</sup>

Under an agreement signed in 2014, China's companies (backed by Chinese banks) will invest \$33.7 billion to build and operate coal, wind, solar and hydro energy projects in the corridor, intended to supply 16,500 MW of electricity to the grid by 2021.

Twenty-nine industrial parks and 21 mining zones are also planned along the corridor's western, central and eastern routes (see map below).<sup>55 56</sup>

# China-Pakistan Economic Corridor (CPEC)





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## FROM TRANSPORT CORRIDORS TO TRANSIT CORRIDORS

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CAREC's transport corridors are intended to build "connectivity" between centres of production and points of consumption both within and between participating CAREC countries and, more broadly, with the wider world. But it is widely acknowledged that new roads, railways, airports and waterways will not by themselves deliver the truncation of time and space that capital demands.

"Soft" infrastructure, in the form of improved logistics and the dismantling of trade barriers, is also deemed necessary if bottlenecks are to be avoided and goods are to flow seamlessly across borders. Without such soft infrastructure, many warn, the new roads and railways could end up as white elephants.

*As the Central Asia-Caucasus Institute notes:*

"The world is littered with grand infrastructure projects that failed due to the postponement or non-existence of the supporting institutions that are essential to their functioning. The widely quoted phrase 'Build a road (or railroad) and people will use it' is simply wrong. They are just as likely to ignore it."<sup>57</sup>

*The World Bank is equally insistent on the need for "soft infrastructure", arguing that "logistics or trade services efficiency is more important for limiting the cost of being landlocked than investing massively in infrastructure and neglecting the functioning of logistics services".<sup>58</sup>*

CAREC also stresses that "improving physical infrastructure is only part of the equation"<sup>59</sup> and is heavily involved in promoting the World Bank's push for "logistics and trade services efficiency", the declared aim being to transform existing and planned transport corridors into what CAREC calls "transit corridors".

## CAREC'S TRANSIT CORRIDOR PROGRAMME CONSISTS OF THE FOLLOWING MAIN ELEMENTS:



### Pressing for public-private partnerships between governments and logistics companies

to put in place logistics services such as inland container terminals, maintenance and storage facilities, service stations and freight tracking services. CAREC's advice is explicit: would-be logistics firms should look for sites that have free trade zone status and have access to "reliable and cheap input, like power, labour, water". Logistics operators should also seek to obtain a "cheap source of financing like government guaranteed loans, government sponsored debt offerings" and to take advantage of "all forms of government incentives (land grants, tax abatement, training credits, special status zone)".<sup>60</sup>



### Pushing for the dismantling or harmonisation of regulatory standards and policies

that are deemed to hinder the seamless flow of goods and services along transit corridors. Targets include state transport monopolies<sup>64</sup> (with privatisation the proposed solution), transport permit requirements, taxes on imported equipment, restrictive labour practices and what USAID describes as other "legal, regulatory, administrative, documentary, and organizational impediments".<sup>65</sup>



### Funding training programmes for logistics managers.<sup>61</sup>



### Encouraging regional free trade agreements

in order to reduce tariffs and reduce cross-border crossing times. CAREC Trade Policy Coordinating Committee, co-chaired by the ADB and the IMF, is pressing CAREC countries to "create and open, transparent and predictable trade environment" through accession to the World Trade Organisation, including making existing non-tariff measures consistent with WTO Technical Barriers to Trade (TBT) Agreement and Sanitary and Phytosanitary (SPS) Agreement.<sup>66</sup> Between 2001 and 2015, CAREC funded 66 projects<sup>67</sup> worth \$504 million in trade facilitation project.<sup>68</sup> In 2015, all import taxes and fees were eliminated (or incorporated into tariffs) in at least eight CAREC countries. In addition, "five countries eliminated all remaining discrepancies between taxes applied to domestic production and imports".<sup>69</sup>



**Pressing for changes in legislation** to create a "favourable climate for logistics centre investment", principally by encouraging "strong protection of property rights"; the "free flow of capital and information"; "stable, consistent, business friendly government policy"; "unimpeded transport and trade"; attractive, risk adjusted returns"; "incentives"; and "attractive financing".<sup>62</sup>



### Publishing annual reports on logistics performance

by individual CAREC countries as a means of "disciplining" countries into adopting better logistics practice;<sup>63</sup>

FUNDING FOR IMPROVING LOGISTICS ALONG CAREC CORRIDORS HAS BEEN SECURED FROM THE ASIAN DEVELOPMENT BANK FOR A NUMBER OF PROJECTS, INCLUDING:

- ◇ A “multimodal logistics facility” in **Zamyn Uud** in Mongolia. ADB will provide loan and grant assistance of \$45 million, covering 63% of the \$71.64 million project. Once completed, the facility will be managed by a private operator.<sup>70 71</sup>
- ◇ **Upgrading facilities at two border crossing points**, one in Tajikistan and one in the Kyrgyz Republic”.<sup>72 73</sup> The project includes introducing “a single window system for tracking cargo to cut processing time and costs”.

In addition to contributions under the CAREC program, ADB has funded \$24 million for the development of cold chain logistics facilities at Tianjin port, in China.<sup>74</sup> Tianjin is at the south end of the CAREC transport corridor 4b, linking Mongolia and China.

National budgets are also being used to build new logistics centres. In Kazakhstan, the Nurly Zhol or “Bright Path to the Future” programme launched in 2015 announced support for a dry port in Astana. The Astana centre, described as “Kazakhstan's first premium class logistics centre”, provides “multimodal rail-road transportation services”, a container terminal and “special gas chambers for long-term storage of fruit”, and is equipped with modern semi-automated “loading and unloading apparatus”.<sup>75</sup>

The World Bank reports that further transport and logistics centres are to be built in Aktau, Aktobe, Almaty, Atyrau, Kostanai, Pavlodar, Semey and Uralsk.<sup>76 77</sup>

## AGGLOMERATE TO ACCUMULATE!

Transport and transit corridors are viewed by CAREC as stepping stones for the implementation of a broader masterplan: namely the creation of a network of regional “economic corridors” that are intended to engineer the wholesale “spatial reorganisation of economic activity” for the benefit of capital.<sup>78</sup>

The aim is to generate economic growth through the “agglomeration”<sup>79</sup> of people and capital in concentrated urban and industrial zones, in order to increase the “density” of economic activity and exchange.<sup>80</sup>

The six CAREC corridors would not only connect existing centres of production and consumption but would themselves be instruments for creating new “growth poles” through the “clustering” of specific economic activities (mining, tourism, agribusiness, information technology, finance, etc) within each corridor.<sup>81 82</sup>

As such, the corridors are intended to serve as turbo-charged engines of capitalist expansion - sucking in investment by creating concentrated, linked pools of consumers and cheap labour, particularly where accompanying industrialisation of agriculture leads to the migration of rural workers to cities.<sup>83</sup>

The planned “agglomeration” process along the Almaty–Bishkek Corridor in Kazakhstan (part of CAREC’s Corridor 1), for example, is expected to double the number of people living in Almaty over the next 7–10 years, as people move (through economic necessity) to Almaty from the surrounding areas.<sup>84</sup>

To achieve the goals of agglomeration and spatial reorganisation, economic corridors involve more than simply “building or promoting commercial establishments on a particular road”.<sup>85</sup>

Random, ribbon development is to be eschewed in favour of top-down planning, driven (if experience from other countries is indicative) largely by the private sector.

CAREC cites with approval, for example, the private sector planning process adopted by Malaysia for its corridors, where the private sector was bought in at an early stage through extensive “planning labs” and where “the corridor development authorities are staffed by people with private sector backgrounds, whose dominant metric for assessing their performance are the extent of private investments brought into the corridors and the number of jobs created”.<sup>86</sup> Private sector companies (such as multinational Sime Darby) were also selected as anchor investors for specific corridors.<sup>87</sup>

Kazakhstan, which has gone furthest down the cluster road than any of the other CAREC countries, is reported to favour the Malaysian model.

The idea of promoting development through “clusters” and “economic corridors” is not new: the concept has a long history in South Africa and elsewhere. But many corridors have failed to live up to their promised outcomes.<sup>88</sup>

Despite this experience, clusters remain central to CAREC:

--- **Kazakhstan** has identified 12 sectors on which to concentrate: oil-and-gas machine building, tourism, transport logistics, construction materials, food processing, textiles, and metallurgy, cotton, wine and fish.<sup>89 90</sup> Technoparks also being promoted, notably at Astana. In 2005, the Park of Nuclear Technology was set up at Kurchatov to encourage start-ups to develop nuclear and radiation technology, nanotechnology and alternative energy. Funding reportedly came from Germany, South Korea, and Russia.<sup>91</sup>

--- **Kyrgyzstan** is reportedly focussing on adopting clusters “for the processing and realization of agricultural produce, rare minerals, communications, and tourist services”.<sup>92</sup>

--- In **Uzbekistan**, a legal framework is being developed to promote industrial clusters<sup>93</sup>, along with logistics centres.<sup>94</sup>

◇  
-----  
**ENCLAVE DEVELOPMENT**  
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*Details of the specific clusters that are planned for specific CAREC corridors are as yet sketchy. However some elements have emerged of two clusters on CORRIDOR 1:*

◆ -----  
ALMATY'S AGRIBUSINESS CLUSTER  
--- CORRIDOR 1b<sup>95</sup>

The government intends to create an “\$80 billion–\$90 billion regional economic cluster” around Almaty, which, through improved transport links, would enable investors to tap into “lower labour costs” and a “well-educated workforce”.<sup>96</sup>

Two of the agglomerating clusters envisaged are a “Fruit and Vegetable Food Belt Value-Chain Cluster” and a “Dairy and Livestock Value-Chain Cluster”.

Both involve major associated upstream and downstream infrastructure programmes, together with legal and institutional reform to promote private sector investment.

---THESE INCLUDE:

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>◇ Establishing one-stop agro-input shops through public-private partnership (PPP) schemes;</li> <li>◇ Consolidating land through opening up the purchase and sale of land to foreigners, joint ventures, and non-agricultural co-ops;</li> </ul> | <ul style="list-style-type: none"> <li>◇ Promoting joint ventures between local farmer groups and international agribusiness;</li> <li>◇ Creating PPPs for “collection and trading posts to sort, store, package and transport agricultural produce”;</li> <li>◇ Harmonizing food safety, standards, and regulatory measures for fruit and vegetable products</li> </ul> | <ul style="list-style-type: none"> <li>◇ Establishing at least one logistics and trade hub (financed through PPPs) in both Almaty and Bishkek, providing container terminals, refrigerated chambers, banking and freight forwarding facilities, logistics tracking and monitoring services, customs brokerage, and other business development services.<sup>97</sup></li> </ul> |
|---|--|---|

Foreign investors include Inalca Eurasia, a subsidiary of the Cremonini Group, reportedly Italy's largest food-services distributor.<sup>98</sup> In January 2016, the company signed a memorandum with Aktep, one of Kazakhstan's largest meat companies, to participate in a meat cluster project in the Almaty region involving intensive feedlots, meat-packing plants and distribution centres. The feedlots would house between 10,000 and 20,000 animals, supplying 1,500-2,000 cattle a week to a meat-packing plant.<sup>99</sup>



◆ ASTANA'S TECHNICAL AND FINANCIAL CLUSTER  
--- CORRIDOR 1A,C

Several hi-tech or service clusters are planned for Astana, the capital of Kazakhstan, which lies on the North-South and East-West spurs of CAREC Corridor I.

A new Science Park is being developed at Astana's Nazarbayev University, which is intended to serve as an "intellectual innovation cluster." According to The Diplomat, "Ninety companies are expected to participate, although memorandums have to date only been signed with six technology giants: General Electric, Microsoft, Intel, Hewlett Packard, Samsung, and Huawei."<sup>100</sup>

Kazakhstan is also developing the Astana International Finance Centre<sup>101</sup> reportedly focussing on raising infrastructure finance and servicing companies and corporations that invest in infrastructure projects along China's Silk Road Economic Belt.<sup>102</sup> The government has announced that the financial centre will essentially "operate under its own legal regime, derogated from national law"<sup>103</sup>, under the "principles, norms and precedents of England and Wales's law"<sup>104</sup> and English will be the official language. It will host an international arbitration centre which is expected to include foreign judges and arbitrators.<sup>105</sup>

## ANNEX two

RESOURCES  
AND  
FURTHER  
READINGS

## RESOURCES

- 1 <http://www.aims.ca/site/media/aims/Tradescapes.pdf>
- 2 [https://www.amazon.com/Connectography-Mapping-Future-Global-Civilization/dp/0812988558/ref=as\\_li\\_ss\\_tl?s=books&ie=UTF8&qid=1452561598&sr=1-1&keywords=connectography&linkCode=s11&tag=522463f-20&linkId=3fa049955b266402e097627921ed12e1#reader\\_0812988558](https://www.amazon.com/Connectography-Mapping-Future-Global-Civilization/dp/0812988558/ref=as_li_ss_tl?s=books&ie=UTF8&qid=1452561598&sr=1-1&keywords=connectography&linkCode=s11&tag=522463f-20&linkId=3fa049955b266402e097627921ed12e1#reader_0812988558)
- 3 [http://www.iirsa.org/admin\\_iirsa\\_web/Uploads/Documents/API%202016\\_web\\_eng.pdf](http://www.iirsa.org/admin_iirsa_web/Uploads/Documents/API%202016_web_eng.pdf)
- 4 [https://www.portgdansk.pl/port/transport\\_infr/transport\\_net/1.jpg](https://www.portgdansk.pl/port/transport_infr/transport_net/1.jpg)
- 5 <http://www.paragkhanna.com/home/2016/4/18/these-maps-show-how-vast-new-infrastructure-is-bringing-the-world-together>
- 6 <http://in.tool-alfa.com/LinkClick.aspx?fileticket=SHJDhX-ZeV24%3D&tabid=72&mid=486>
- 7 <https://www.theguardian.com/cities/2015/sep/15/indias-future-dmic-delhi-mumbai-industrial-corridor>
- 8 <http://dmicdc.com/about-dmicdc.aspx?mpgid=2&pgidtrail=3>
- 9 <http://focusweb.org/content/pursuing-privatization-adbs-unchanging-vision-development>
- 10 Bunker, S. G. and Ciccantell, P. S. (2005) *Globalization and the Race for Resources*. Baltimore: The Johns Hopkins University Press.
- 11 Ibid
- 12 <http://documents.worldbank.org/curated/en/730971468139804495/pdf/437380REVISED-01BLIC1097808213760720.pdf>
- 13 <http://www.aims.ca/site/media/aims/Tradescapes.pdf>
- 14 <http://continental1.org/wp-content/uploads/2014/06/2009-Global-Trade-Corridors-Study.pdf>
- 15 <http://logisticalworlds.org/blogs/logistics-infrastructures-and-governance-after-piraeus-notes-on-logistical-worlds>
- 16 [http://archives.cerium.ca/IMG/pdf/Notes\\_Analyses014a.pdf](http://archives.cerium.ca/IMG/pdf/Notes_Analyses014a.pdf)
- 17 [http://www.mckinsey.com/insights/strategy/the\\_four\\_global\\_forces\\_breaking\\_all\\_the\\_trends](http://www.mckinsey.com/insights/strategy/the_four_global_forces_breaking_all_the_trends)
- 18 <http://documents.worldbank.org/curated/en/730971468139804495/pdf/437380REVISED-01BLIC1097808213760720.pdf>
- 19 Ibid
- 20 For further discussion, see: N. Hildyard, *Licensed Larceny: infrastructure, financial extraction and the global south*, Manchester University Press, 2016
- 21 <http://www.un.org/pga/71/wp-content/uploads/sites/40/2017/06/Bridging-Global-Infrastructure-Gaps-Full-report-June-2016.pdf>
- 22 <https://www.oecd.org/g20/topics/development/WB-IMF-OECD-report-Capital-Markets-Instruments-for-Infrastructure-and-SME-Financing.pdf>
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- 26 <http://logisticalworlds.org/blogs/logistics-infrastructures-and-governance-after-piraeus-notes-on-logistical-worlds>
- 27 <http://www.carecprogram.org/index.php?page=carec-corridors>
- 28 <https://www.adb.org/countries/sub-regional-programs/carec>
- 29 <https://www.adb.org/sites/default/files/publication/214136/aeir-2016.pdf>
- 30 <https://docmh.com/download/documents/turning-the-tide-in-turbulent-times-leveraging-trade-for-kazakhstan-s-development-Tcwn5eA>
- 31 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/2016-CAREC-2020-MTR.pdf>
- 32 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/2016-CAREC-2020-MTR.pdf>
- 33 <http://www.carecprogram.org/index.php?page=carec-projects>
- 34 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/2016-CAREC-2020-MTR.pdf>
- 35 <https://www.adb.org/sites/default/files/publication/214136/aeir-2016.pdf>
- 36 <https://www.adb.org/sites/default/files/publication/214136/aeir-2016.pdf>
- 37 <https://www.adb.org/sites/default/files/publication/214136/aeir-2016.pdf>
- 38 <http://www.carecprogram.org/index.php?page=carec-corridors>
- 39 <https://www.adb.org/publications/operationalizing-economic-corridors-central-asia-case-study-almaty-bishkek-corridor>  
FULL REPORT AT: <https://www.adb.org/sites/default/files/publication/153330/economic-corridors-central-asia.pdf>
- 40 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/2015-CAREC-CPMM-Annual-Report.pdf>
- 41 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/CAREC-ECD-study.pdf>
- 42 <http://www.carecprogram.org/uploads/docs/CAREC-TTF-Strategy-Implementation-Action-Plan.pdf>
- 43 <http://www.carecprogram.org/uploads/docs/CAREC-Publications/CAREC-ECD-study.pdf>
- 44 <https://docmh.com/download/documents/turning-the-tide-in-turbulent-times-leveraging-trade-for-kazakhstan-s-development-Tcwn5eA>
- 45 <http://www.carecprogram.org/uploads/docs/CAREC-TTF-Strategy-Implementation-Action-Plan.pdf>
- 46 <http://www.carecprogram.org/uploads/docs/CAREC-TTF-Strategy-Implementation-Action-Plan.pdf>



- 47** -----  
<http://www.carecprogram.org/uploads/docs/CAREC-Publications/CAREC-ECD-study.pdf>
- 48** -----  
<http://www.carecprogram.org/uploads/docs/CAREC-TTF-Strategy-Implementation-Action-Plan.pdf>
- 49** -----  
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