India-Middle East-Europe Economic Corridor (IMEC)

Bridging Economic and Digital Aspirations

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About KAPSARC

KAPSARC is an advisory think tank within global energy economics and sustainability providing advisory services to entities and authorities in the Saudi energy sector to advance Saudi Arabia’s energy sector and inform global policies through evidence-based advice and applied research.

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The announcement of the India-Middle East-Europe Economic Corridor (IMEC) during the 2023 Group of 20 (G20) Summit in New Delhi marks a significant development for the Partnership for Global Infrastructure and Investment (PGII) initiative. The PGII formation was announced in 2022 during the Group of Seven (G7) German Presidency. Initially formulated by the United Kingdom as the Build Back Better World (B3W) in 2021 during the G7 Presidency, and subsequently renamed, PGII is an initiative focused on providing infrastructure to help developing countries progress by addressing infrastructure funding requirements through public and private investments. During the recently concluded G20 Summit, at a meeting co-chaired by India and the United States of America (USA), the IMEC was announced. The proposed economic corridor will connect and stimulate economic development and growth by integrating three regions: Asia, the Arabian Gulf, and Europe (Ministry of External Affairs 2023).

The IMEC comprises two key corridors: an eastern corridor connecting India to the Middle East and a northern corridor connecting the Middle East to Europe. It is proposed as a multi-modal transportation corridor that includes roads, railways, ports, and related logistical infrastructure. The Memorandum of Understanding (MoU) for IMEC was signed by several members, including India, the USA, Saudi Arabia, the United Arab Emirates (UAE), the European Union (EU), Italy, France, and Germany (The White House 2023, Ministry of External Affairs 2023).

Figure 1. Map of the proposed India-Middle East-Europe Economic Corridor.

Source: Visualized by Authors on publicly available information.
As shown in Figure 1 above, the corridor is expected to originate from India, connect the UAE, Saudi Arabia, Jordan, and Israel, and terminate in the EU. The proposed corridor will have a mix of rail and sea links for physical connectivity and is also expected to have a pipeline for clean hydrogen, cables for electricity, and data cables for high-bandwidth digital connectivity.

**Benefits of IMEC**

IMEC aims to enhance trade connectivity, export clean energy, and expand access to reliable, clean electricity, further unlocking sustainable and inclusive economic growth. Speaking at the meeting, the President of the European Commission, Ms. Ursula von der Leyen, indicated that the proposed corridor would help provide cost savings of almost 40% over existing transport networks between the regions (Kartik 2023).

The combined GDP of countries involved in the IMEC project stands at about $47 trillion, or almost half the world’s GDP, and representing a consumer market of 2.25 billion people, as shown in Figure 2 above, could serve as an enormous growth opportunity for the world and the region involved. Increasing connectivity and helping shape regional supply chains by increasing accessibility and providing trade opportunities for all the stakeholders are expected to be some of the benefits of the corridor.

**Figure 2.** Graph showing GDP, current prices in USD, and population of IMEC countries.

![Graph showing GDP, current prices in USD, and population of IMEC countries.](image_url)

*Source: International Monetary Fund 2022, The World Bank and KAPSARC Analysis*
Expanding Infrastructure Investments

IMEC involves connectivity through rail and sea routes, with railway infrastructure providing a reliable, resilient, and cost-effective cross-border ship-to-rail transportation network to complement existing maritime and road transport routes, enabling easy access to goods and services between India, the UAE, Saudi Arabia, Jordan, Israel, and Europe. The development of the rail network connecting Asia and Europe will be the critical piece of the corridor, as the ports of Dubai and Haifa could be accessed by any company or country wanting to transship goods from the Mediterranean to the Indian Ocean. The rail transport infrastructure will give an added advantage to Saudi Arabia’s National Transport and Logistics Strategy (NTLS), a comprehensive program aiming to position Saudi Arabia as a global logistics hub connecting three continents (Asia, Europe, and Africa) in support of Saudi Vision 2030. Transport and logistics are a significant focus area for the Kingdom’s Vision 2030 and a vital enabling factor for economic sectors toward sustainable development (Arab News 2021). Regarding the development of additional infrastructure, there already exists a railway network from the Emirates up to Al Ghuweifat on the Emirates-Saudi border. Additional rail tracks would need to be laid to connect Al Ghuweifat to Haradh in Saudi Arabia. From Haradh to Riyadh and then to the Jordanian border town of Al Qurayat, the 2,750 km long North-South Railway provides connectivity (Haradh-Riyadh rail section needs to be built). New tracks will need to be laid from Al Qurayat to Beit Shean, Israel, and this can be covered under the ongoing Connecting Israel program. The Connecting Israel program intends to construct new railway lines and increase rail connectivity within Israel. IMEC could benefit from these investments in increasing railway connectivity and help provide connectivity from the rail head at Beit Shean to Al Qurayat. Beit Shean already has rail connectivity to the port of Haifa on the Eastern Mediterranean and would help complete the rail transport network (Smith 2023). Additional rail investments by Saudi Arabia and Israel, respectively, could help move the timelines for initiating trial shipments. The Gulf Cooperation Council (GCC), of which Saudi Arabia and the UAE are key stakeholders, has been seeking to revive the GCC Railway Project, and the IMEC infrastructure investments could help reinvigorate its development. With the formation of the GCC Railways Authority in December 2021, a key institution to help develop standards and increase integration and coordination across the GCC countries is in place. Saudi Arabia also plans to invest in expanding its railway network by laying 8,000 km of new track – in effect, tripling its rail network (Bhatia 2023, Oxford Business Group 2022). Regional plans to continue investment in rail linkages could help transform and evolve into a much larger interconnected economic bloc (Reuters 2023, Lewis 2017). Along with investment in transport infrastructure, IMEC countries will invest in electricity infrastructure, digital networks, and pipelines for clean hydrogen.

Clean Energy Pathways

IMEC member countries plan to lay cables for electricity and digital connectivity and pipelines for clean hydrogen trade. This will enable clean energy trade between countries in the region and also provide a transport option for exports. The laying of electricity infrastructure will help progress the India-led initiative, One Sun One World One Grid (OSOWOG), which aims to connect different regional grids through a common grid that will be used to transfer renewable electricity across regions. The OSOWOG initiative seeks to provide a global framework for investment in solar-based renewable electricity generation and build long-distance cross-border transmission lines to connect and disseminate renewable energy (International Solar Alliance 2021). Incidentally, India, along with the UAE and Saudi Arabia, had initiated preliminary discussions to link their power grids through undersea cables (Arab News 2023, The Economics Times 2023). As one of the outcomes from the recently concluded first meeting of the India-Saudi Arabia Strategic Partnership Council, during the state visit of Crown Prince and Prime Minister, HRH Mohammed bin Salman, India and Saudi Arabia signed an MoU, seeking to cooperate on building an undersea cable to link their respective electricity grids (Dutta 2023). The clean energy trade between the IMEC countries could also pave the way for a NetZero future by providing grid stability and continuous electricity, potentially alleviating the need for large grid-scale storage.

Economic Value and Job Creation

IMEC infrastructure and connectivity projects will be devised to enhance economic efficiency, cut down expenses, and promote economic collaboration among participating nations. These efforts are expected to create job opportunities and align with the global objective of reducing greenhouse gas emissions. Furthermore, IMEC will be the most direct connection between the participating countries. This economic corridor is expected to accelerate trade between the countries and could reduce the cost and time required to transport goods and services. The physical and digital infrastructure will help stimulate economic growth, foster greater cooperation among Middle Eastern countries, and establish the region as a hub for economic activity.
Digitalization and Connectivity

For India, the corridor is also a means to propagate its Digital Public Infrastructure (DPI), developed over the years and showcased during the G20 Presidency. India’s DPI has helped increase financial inclusion through identity and unified payment mechanisms, which can be accessed through smartphones and mobile connectivity. Its payment networks, RuPay, and Unified Payments Interface (UPI) have been showcased internationally, with Singapore and Dubai enabling faster cross-border transactions and remittances (Das 2023, Vyas 2023).

While DPI is potentially expected to be a part of the economic corridor, it will need to include a data cable alongside the physical infrastructure. Italian Prime Minister Giorgia Meloni indicated during the IMEC announcement that the Blue Raman project will help connect Europe with Asia. Proposed by Google, the Blue Raman cable system is projected to connect Italy, Greece, and Israel (as part of the Blue Cable System) with Jordan, Saudi Arabia, Oman, and India (as part of the Raman Cable System). Such digital highways connecting these countries are expected to provide resilience to increasingly salient digital economies and increase connectivity to high-growth economies along the transit path of the cable system (Qiu 2021, Sengupta 2023).

Challenges and Challengers

IMEC is unquestionably ambitious, representing an array of challenges and complexities. For example, it is unclear what the actual demand and potential economic impact would be along the proposed corridor. Furthermore, IMEC will still require substantial investment in greenfield railway and related logistical infrastructure, along with possible upgrades in port infrastructure, to cater to the additional traffic expected. It is pertinent to note that the EU, under its Global Gateway Project, has established a €300 billion fund for investments in infrastructure globally, which could potentially be used to fund the investments required in IMEC.

Spanning from India, through the Middle East, to various European nations, coordinating infrastructure development and trade agreements among these diverse regions could prove exceptionally intricate, which would need to be considered and then carefully managed. The MoU is a good starting point, but it needs to be implemented with concrete investment plans and pilots to establish viability and provide granularity regarding costs.

As a comparison (in terms of the complexities involved), the International North-South Transport Corridor (INSTC), shown in Figure 3 below, is primarily a logistics corridor seeking to leverage connectivity to help develop logistics pathways from India to Europe that has been only partially successful, due to the impact of geopolitical events, and slow to provide economic benefits.

Shipments have used the network to transit cargo from Finland to India, from India to Russia and Europe, and from Russia to Saudi Arabia (Karimi 2021, Khalilov 2021, Karvi 2022, Russia Briefing 2023).

1 International North-South Transport Corridor (INSTC), established on 12th September 2000 in St. Petersburg, Russia, by India, Iran, and Russia, is a multi-modal transportation corridor, comprised of rail, road, and maritime modes. It was developed with the objective to promote cooperation in transportation amongst member states of INSTC and was designed to connect the Indian Ocean with the Baltic Sea, thus ensuring that a cargo corridor for trade from Europe to South Asia could be established without having to take the longer route of across the Atlantic, Mediterranean, and Arabian Gulf. After the initial founding of the INSTC by India, Iran, and Russia, it was expanded to include Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Belarus, Oman, Syria, and Bulgaria (Asia Regional Integration Center 2015). The conflict in Europe has constrained access to mainland Europe, somewhat limiting the appeal of the corridor.
Figure 3. Map illustrating the International North-South Transport Corridor (INSTC) and its member countries

Source: Visualized by the authors. See (Saxena 2020).
Conclusion

While the finer details regarding the corridor are still to be worked out, the expectation is that the participants meeting within the next couple of months to develop and commit to an action plan with relevant timetables would help further advance the project. With each IMEC country expected to build its infrastructure connected to others under coordinated technical design, financial, legal, and regulatory standards, diplomatic efforts will be essential to guarantee the uninterrupted flow of goods, data, energy, and associated services. Creating an extensive economic corridor will undoubtedly produce a substantial environmental footprint. It is imperative to integrate comprehensive environmental evaluations and embrace sustainable practices within the project to address this. Additionally, the successful operation of such a corridor would require essential elements like technological integration and the adoption of state-of-the-art transportation, logistics, and data management technologies and systems.

Furthermore, ensuring the alignment of regulations and standards across diverse sectors, including logistics, finance, and energy, is crucial to facilitate smooth operations, which will help to increase efficiency and reduce costs. It is evident that this transformative partnership has the potential to inaugurate a fresh era of global connectivity, leading to enhanced efficiencies, cost reductions, and reinforced economic cohesion. Such a massive logistical exercise generates several research questions that must be addressed. Among them are the potential advantages accrued to participating nations and how they can maximize the opportunities generated. The UAE and Saudi Arabia are strategic partners for India. Their recent induction into the BRICS\(^2\) organization also provides a chance to understand the benefits of working through overlapping economic frameworks of BRICS and IMEC. It would be interesting to analyze how IMEC countries balance the logistics of energy transition and evolve their trade frameworks to deal with the current challenges of sourcing raw materials for their economic growth, while adhering to climate and sustainability targets.

It would be prudent for each participating country to ensure that the corridor is agnostic in terms of traffic, as higher transit volumes would help defray the developmental costs of such an aspirational project. By assuring that countries in the vicinity of the corridor can participate in it in an environment of cooperation and collaboration, IMEC founding members would help reduce potential geopolitical tensions and refute allegations of competitive economic corridors with other such regional and international networks. The G20 has often been accused of failing in its multilateral objectives. IMEC seeks to address that and provide a framework for an increase in trade and participation in infrastructure building without onerous debt burdens. The recent arrival of a transit freight train from Russia to Saudi Arabia, transiting through Kazakhstan, Turkmenistan, and Iran, has illustrated that international economic corridors are increasingly gaining attention from policymakers, and projects such as IMEC and INSTC place Saudi Arabia at their center.

\(^2\) BRICS is an economic and political grouping of Brazil, Russia, India, China and South Africa. It was formed in initially by Brazil, Russia, India and China in 2006 and expanded to BRICS through the inclusion of South Africa in 2010. The acronym is based on the initials of the names of each of the countries. BRICS has expanded in 2023 with the inclusion of Argentina, Ethiopia, Egypt, Iran, Saudi Arabia and the UAE after the BRICS Summit in South Africa.
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