

# INDIA - FRANCE

## TRACK 1.5 DIALOGUE





# **INDIA-FRANCE TRACK 1.5 DIALOGUE**

## **Innovation, Sustainability & Multilateral Cooperation**

Roundtable Report  
April 2022





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Government of India



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DE L'EUROPE  
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*Liberté  
Égalité  
Fraternité*





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## 1. Introduction

The India-France Track 1.5 Dialogue: Innovation, Sustainability, and Multilateral Cooperation is a three-year initiative between Gateway House, Mumbai, and the Institut français des relations internationales (Ifri), Paris, to enhance the growing relationship between India and France. Think tank experts, government officials, and business leaders will convene annually to promote bilateral economic growth and innovation.

India and France maintain strong relations built on the foundation of collective values and common goals. Economic and strategic ties between India and France are expanding, and there are new areas to explore for mutual benefit. The Track 1.5 Dialogue is a suitable format for this. Both countries prioritise sustainability, energy, and the Indo-Pacific region. The Dialogue aims to provide policy recommendations to promote innovation and navigate evolving governance issues through bilateral and multilateral cooperation.

On 16 March 2022, Gateway House, Mumbai, and Ifri, Paris, co-hosted India-France Track 1.5 Dialogue: Innovation, Sustainability and Multilateral Cooperation, in partnership with the Ministry of External Affairs, Government of India, and the Ministry for Europe and Foreign Affairs, Government of France, supported by India EXIM Bank.

The focus of the first roundtable was on digital cooperation and energy transitions. The two subjects were chosen to reflect the strengths of both countries and the technical collaborations that can be effectively leveraged.

The roundtable discussion was held in hybrid format in Mumbai and Paris. Government officials, corporations, entrepreneurs and leading scholars and experts from both India and France participated in the dialogue.

The keynote addresses were delivered by Harsh V. Shringla, Foreign Secretary, Government of India, and Francois Delattre, Secretary General of the Ministry for Europe and Foreign Affairs, Government of France. Jawed Ashraf, India's Ambassador to France, and Emmanuel Lenain, France's Ambassador to India, commenced the discussions with a comprehensive conversation on the bilateral.



## 2. Key Findings

France and India have long been reliable partners. As the strategic importance of their relationship is grows, bilateral exchanges are set to deepen. This first Track 1.5 roundtable focused on the key areas of digital cooperation and energy transitions, reflecting the forward-thinking nature of the bilateral and the technical collaboration that India and France can leverage through cooperation.

### Geopolitics

- India and France both underline the importance of maintaining strategic autonomy and have a shared understanding of global risks in many domains. There is a high-quality India-France political dialogue ongoing in areas of defence, maritime, counterterrorism, Indo-Pacific. They are now forging ahead with cooperation in 21st century issues like digital, cyber, green energy, blue economy and ocean sciences, space. Both countries possess advanced skills and similar thinking in these areas.
- There is an understanding on France and India's interests and dependencies, be they in relation to China, Russia, the U.S. Common ambitions to enhance strategic autonomy and improve resilience provide fertile ground for further collaboration.
- India can play a significant diplomatic role to soften the tendency of confrontation of the New East and the New West. Both can work to insulate the Indo-Pacific from the worst consequences of current conflicts.
- It is necessary to enhance trade and investment and to cooperate on supply chain resilience in energy, health, digital and defence with trusted partners.

### Digitalisation

- The French company Atos provides India with supercomputing hardware and quantum computing simulation software. More generally, India is an important hub for French companies in their day-to-day activities as well as R&D and innovation. Bangalore in particular is important for the French economy. Many French tech engineers are located there and France has a special tech visa for Indian engineers.
- Five areas of increased cooperation: Digital sovereignty, where India is a potential model for France with its use of open/opensource public goods (India Stack, MOSIP); Regulation, especially personal data empowerment and protection; Health data and health tech; Diplomacy with the UN, G20, Quad and tech alliances; economic security and best practices in value-chain resilience-building.
- France and India must work to prevent digital platforms being weaponised, and from threats to critical infrastructure. They must use their unique strengths – India in conceptualising and deploying large scale open/open-source platforms, foundational IDs, in IT services and fintech; and France in AI, cyber, nuclear power, data empowerment & protection, to create the next-gen solutions and standards for the world. Other areas of cooperation are on internet governance, in the ITU, control of big tech and content moderation, and sovereignty in digital payments.
- This can be done bilaterally and multilaterally, in Francophone Africa and the Indo-Pacific, with a techno-legal framework designed for individuals to control their own information and data.
- Top 10 democracies can come together in a D10 or T10 to protect and nurture a free internet multilaterally. Companies that protect and promote their propriety systems are starting to research open source, buying companies in the space to understand it better.

## Energy Transitions

- The case for green energy is growing stronger as soaring energy costs undermine purchasing power and industry competitiveness. There is a drastic redirection of energy flows and an infrastructure crunch. The current crisis is forcing Europe to reconsider or even reinvent its economic model and accelerate investment in low carbon alternatives (wind, solar PV, biomethane, heat pumps, nuclear & clean hydrogen). The EU and India can collaborate more.
- Geopolitical reasons are ascribed to current high oil and gas prices, but the long-term factor responsible for this is several years of underinvestment in traditional energy sources, specifically petroleum. Hydrogen presents a serious alternative; more than energy, hydrogen matters for food security as it is used to make urea fertilizer. It can also be used as fuel for heavy trucks, which are 40% of India's oil consumption. Three industries already using hydrogen are petroleum, fertilizer, and steel.
- India has the market; France has the technology and capital that India needs to transition to green hydrogen. TotalEnergies and Engie are already pursuing hydrogen energy, and pilot projects with Indian partners can be planned. TotalEnergies and Adani are building city gas in 54 circles in India. Active corporate intent is needed to explore further.
- Conditions for the scale up of clean hydrogen: a) India's requirement is \$1 trillion for a green hydrogen ecosystem infrastructure; b) A green hydrogen focused venture capital fund for investing in ideas for green hydrogen can be jointly established; c) Incentives for CapEx and OpEx are necessary; d) access to stable renewable electricity and robust guarantees of origin; e) Need massive investments in grids and its ecosystem, which France has developed as part of the EU grid. There are many takers for green energy in India if the cost of capital is decreased.
- India has to prepare its exporters to be 100% carbon-free; the EU has provided an incentive to decarbonize energy-intensive industries with the introduction of a carbon border adjustment mechanism.
- On Nuclear: Macron's re-election plan is to increase nuclear investment. France has plans to build six (and up to 14) new EPR2 reactors while also developing innovative small-scale reactors with the launch of a specific €1bn R&D programme (France 2030 investment plan). India seeks support and cooperation of France to build nuclear submarines.

### 3. Speaker Briefs for Session on Digital Collaboration: Imagining the Future

#### French ambitions and a case for deepening dialogue on digital challenges

Alice Pannier, *Head - Geopolitics of Technology Program, Ifri*

Over the past five years, France, under the presidency of Emmanuel Macron, has placed digital issues at the center of its economic, security, and foreign policies. The international context characterized by the United States-China economic war, the Covid-19 pandemic, and the proliferation of cyberattacks, has reinforced the need for such policy activism and placed the issues of digital, technological and even industrial sovereignty at the heart of the broader project of European strategic autonomy. Indeed, along with the shift to low-carbon energy, the EU has centered on digital affairs as part of the “twin transitions” that are shaping Europe’s future. To achieve its ambitions, the French government has taken a series of measures that have focused on the regulation of the digital sector and data protection, the security of businesses and digital and telecommunications infrastructure, and the development of the industrial and digital research and innovation ecosystem. In this context, France and India have a broad space for deepening their cooperation.

#### Bilateral and multilateral cooperation

- The 2019 roadmap: Bilaterally, the digital and cybersecurity roadmap between France and India (signed in 2019) is one of India’s most detailed cooperation frameworks. In particular, the France-India digital partnership addresses 5G, AI and quantum. 5G security has been an area of joint concern, with the goal of sharing information on legal and regulatory frameworks and sharing best practices.
- On Supercomputing and quantum: France and India have each launched quantum strategies: €1.8 bn in France, launched in Jan 2021; and \$1.2 bn in India, launched in 2020. French companies such as ATOS have been important players in this field.
- Research cooperation: France and India have jointly committed to spending €2 million annually through a consortium of government, industry and academia for AI research.
- Work on international governance on internet and AI: Both countries reinforce multilateral, multistakeholder initiatives at UN level, for instance the Secretary General’s roadmap on digital cooperation or UNESCO’s work on a legal instrument on ethics of AI. The elaboration of principles for trustworthy AI have also brought India and France together with Canada and 12 other partners within the G20.

#### Growing contacts in tech ecosystems between France and India

- French and Indian tech ecosystems are well connected through India’s global centrality in digital services, and through the presence of many French industrial and technology groups in India that conduct day-to-day activities (Capgemini, Sopra Steria, Blablacar, OVH...) and innovation, R&D activities (Atos, Dassault Systèmes, Ubisoft...).
- France has also developed a French Tech visa system for Indian engineers and entrepreneurs.
- The development of the French tech community in Bangalore is noteworthy.
- In November 2021, the first India-France digital partnership summit (InFINITY) was held, supported by the Indian embassy in Paris.

## Looking ahead, areas for future discussions

- Exchange of views on definition and implementation of digital sovereignty, given high dependence of both on foreign hardware and software and desire to develop local alternatives.
- India Stack as a model for France? India is at the forefront of digitalisation with the India Stack APIs (e-identity and e-payment), open-source code. Could it be a model for France to build its own solutions?
- Growing convergence on data protection and digital platform regulation (despite different views about state control over internet) – what to make of India’s upcoming data protection law?
- Economic security is an area of common concern wherein sharing best practices in areas such as supply-chain resilience and foreign investment screening
- Other fields to explore include blockchain and the regulation of crypto-assets, and the development of health tech and the treatment of health data.
- A common reflection is needed on the international frameworks for discussing and cooperating on digital technologies.

## India and France: Leveraging the Complementary Capabilities

Sanjay Anandaram, *Ambassador, iSpirt*

Geopolitics is impacting digital platforms and offerings, which are being weaponised by countries. In the on-going Ukraine conflict, Facebook has selectively allowed violence in Russia, and Google has stopped GooglePay in Russia. What if this happened in France? Or India? Necessary for countries to have their own platforms and systems in place.

India and France can work bilaterally, without being subject to external forces and interests, to jointly create and together deploy tech solutions. Each brings a set of unique capabilities.

India has strengths in conceptualizing, developing, and deploying large scale digital platforms, at continental scale and with diverse use cases. These are open, uniquely aimed, affordable, adaptable, accessible and can be called “digital public goods”. They are used in areas as diverse as financial services, health, welfare, tolls, logistics, education, drones and even agriculture. India has the world’s third-largest tech unicorns. IT services and tech start-ups are a rapidly growing area.

France brings deep tech experience in AI, cybersecurity, defence, nuclear power, and global influence in institutions and countries around the world. India is seen as benign, non-hegemonic, and is a huge market for French technology. Together, India and France can create next-gen solutions for the world.

Three areas where India and France can work together on digitalisation and technology development:

- Bilaterally, and multilaterally in Francophone Africa and the Indo-Pacific.
- French companies are already deploying India’s foundational ID, the Modular Open Source Identity Platform (MOSIP) in Francophone Africa. It is designed and developed in India and currently installed in Morocco by French company Atos. Indian and French companies can put to use these digital platforms for the common good, beyond the command and control of big tech.
- India has a techno-legal architecture for empowering owners of data generated by and through its systems. Called Data Empowerment & Protection Architecture, or DEPA, it ensures that rather than view data from the privacy and security lens, individuals can have control over their own information and data under laws that allow its use to be audited and managed.

DEPA will enhance GDPR, by embedding technology within to ensure compliance, an improvement over imposing fines. An initiative for creating a joint forum including India and France is under way, with conversations involving senior French government officials.

The architectural principles that power India's digital public platforms and protocols can be worked on bilaterally and deployed in areas like health, credit, agriculture, space, cybersecurity, defence and nuclear. They allow for an enabling ecosystem to emerge with private sector innovation working in parallel with the legal and policy guide rails defined by the public sector - a powerful model to consider.

India and France can operate within their own bilateral arrangements based on mutual interests, and not the requirements of other blocs or countries, be it the U.S., Australia or China.

## 4. Speaker Briefs for Session on Energy Transitions: Deepening & Diversifying

### The French energy climate strategy and the case for strengthening collaboration with India

Carole Mathieu, *Center for Energy & Climate, Ifri*

Host of the COP21 climate conference, France stands firmly behind the Paris Agreement and maintains constant efforts to strengthen multilateral cooperation in the hope of an upturn in global climate ambitions. Within the European Union (EU), France has pushed for the adoption of both the 2050 climate neutrality target and the 2030 milestone of a -55% net emission reduction compared to 1990 levels, which represents a major additional effort compared to the previously agreed -40%. The EU Green Deal is now on the table with a wide range of policy reforms serving one objective: reinventing the EU's economic model to address the climate and environmental crisis. The current decade is seen as a make-or-break moment: the EU intends to move from incremental change to systemic change, i.e., extending emission reduction efforts beyond the electricity sector, triggering a massive switch to clean mobility, rolling out a renovation wave to cut building energy consumption and targeting hard-to-abate sectors including industry and agriculture.

The war in Ukraine makes the Green Deal even more important for the EU's strategic interests, but it can also be a hurdle for its implementation. It strengthens the case for ending the EU's structural dependence on imported fossil fuel supplies – imports account for 97% of the EU's oil, 90% of its gas & 70% of its hard coal. However, soaring energy prices are undermining private funding capacities and the challenge for policy makers is to design climate policies which will not exacerbate but reduce current threats weighing on competitiveness and consumers' purchasing power. While the EU gets ready for a drastic reduction of its gas imports from Russia, diversification efforts can only provide a partial response due to infrastructure constraints. To quickly reduce gas import needs, a switch to coal and fuel-based alternatives is likely in the electricity and industrial sectors. The only chance to mitigate the impact on the EU's emission performance will be to cut gas consumption wherever possible, hence the focus on changing consumer behaviours to save gas in a hurry. In parallel, France and the EU will promote the quick roll-out of massive investments contributing to both energy security and climate protection: in the coming years, there will be a fast-paced deployment of wind energy, especially offshore, and solar PV with installed capacities expected to double by 2025 and triple by 2030. Biomethane production will be ramped up to 35bcm/yr by 2030 (compared to 18bcm/yr today) and the yearly pace of heat pump deployment will double. While nuclear accounts for 25% of total EU electricity production today, some member states, including France if president Macron is re-elected, will invest in new reactors to ensure the long-term future of nuclear energy and facilitate the transition to the post fossil-fuel era. Finally, the EU will actively promote the market for clean hydrogen and boost domestic production (5 mt by 2030) as well as imports from external countries (10 mt by 2030).

As with the oil shocks of the 1970's, the ongoing geopolitical crisis is forcing Europeans to reconsider their domestic energy policy and foster international partnerships with countries committed to climate protection. In a short-term perspective, Europe has a strong interest in discussing ongoing market developments with all major LNG buyers, including India, to coordinate action plans and cope with global supply tightness. Looking further, France, the EU and India have a shared interest in working hand-in-hand on their green agenda, with the dual objective of turning climate action



into an economic opportunity and also strengthening their respective strategic autonomy. From reaching renewable energy targets despite supply chain disruptions and rising raw material costs, to deploying secure and affordable nuclear energy and making clean hydrogen a global trade commodity, Europe and India's energy agendas converge in many aspects. They have already set up the avenues for cooperation through the International Solar Alliance, the EU-India clean energy & climate partnership and the 2021 agreement between France and India on renewable energy. The case for strengthening such ties has never been stronger.

## **India's Energy Outlook and the role of the India-France Bilateral**

Amit Bhandari, *Senior Fellow, Gateway House*

With commodity markets in turmoil currently, it is necessary to analyse the hardship that high prices can cause, especially in India.

Geopolitical reasons may be ascribed to current to high oil and gas prices, but along term factor responsible for it is the underinvestment in traditional energy sources, specifically petroleum, for the past several years. An example: the Norwegian Sovereign Wealth Fund, amongst many other institutions, which have declared they will not invest in oil and gas companies. Crude oil prices had already touched \$90/barrel in December, well before the current turn of events.

This trend of reduced investment in hydrocarbons will persist., and the world will face periodic commodity price shocks, with different triggers at each time.

The spike in natural gas prices to unprecedented levels is also problematic, especially for fertilizers like urea used for agriculture in India. High food prices led to political upheavals in West Asia, which continue to this day.

While India is a big consumer of oil and gas, it cannot, on its own shift the global investment scenario for hydrocarbons. So, what can India do to protect itself against energy price shocks, which result in fertilizer and food shocks?

India must look at hydrogen as a serious alternative. More than energy, hydrogen matters for food security as it is used to produce urea fertilizer. Gateway House has just published a Hydrogen Plan for India.

It's compelling. First, renewable energy, in its present form, has shortcomings and intermittency is one of them. Second, most of India's electricity comes from locally produced coal, which means renewable electricity is replacing the cheapest form of carbon.

The solution is to use renewable energy to produce green hydrogen, making it a substitute for natural gas and even oil, thus improving its economic viability. It is currently expensive and not produced at industrial scale anywhere in the world. But with wider use, green hydrogen can be much cheaper, reducing carbon emissions and India's vulnerability to price shocks. Green hydrogen can be promoted by first using it in existing applications like petroleum refining, steel, and fertilizer industries. Hydrogen can also be used as a fuel for heavy trucks – which account for about 40% of India's oil consumption and where electric vehicles are not an option.

How can India and France work together on this?

India needs technology, know-how as well as capital for a transition to green hydrogen. French companies like Total and Engie have already announced plans for large electrolysers running on renewable energy. Pilot projects, possibly in joint ventures with Indian partners, can provide much needed experience with this technology before it is scaled up.

French automaker Renault is currently in a partnership with a US company to create infrastructure like fuel stations for light trucks running on hydrogen. If hydrogen can be used as a transport fuel, the potential for carbon reduction increases manifold. Finally, capital not just for mega-projects, but also venture capital for interesting ideas for green hydrogen use. Entrepreneurs are better at innovation than companies or governments – this engine also needs to be enabled, perhaps by setting up a green hydrogen focused venture capital fund.



