



In association with



Powering up

Electronics manufacturing in India

December 2020

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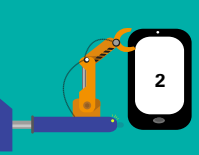
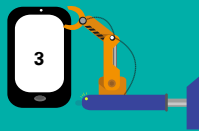


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Note from the Union Minister

Growth in the Indian electronics sector has been a key achievement for Digital India and Make In India initiatives. From just two mobile phone factories in 2014, India has emerged as the second largest mobile phone manufacturer in the world. All major electronics manufacturers of the world have invested in India and are now implementing backward integrations by getting their component suppliers.

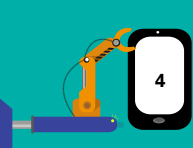
This is just a beginning and our government shall continue to offer attractive policies needed to develop India as the global electronics manufacturing hub. I commend HSBC India and KPMG in India for their intellectual contribution through a well-researched report on electronics sector, which shall serve as a good reference point for industry and policy makers.



Shri Ravi Shankar Prasad

**Union Minister for Electronics & Information Technology,
Communications and Law & Justice**

Government of India



Foreword - HSBC India

The fallout from the pandemic has had a substantial impact on the demand trajectory across sectors and on the financial soundness and investment plans of corporates. At the same time, it also required countries and businesses to confront the crisis, respond at pace and recalibrate their strategy. As we increasingly move towards a 'post-COVID normal', companies need to decide on the scale of action necessary to navigate towards greater resilience and assess the impact of a 'digital first' future.

We have seen the capital markets remaining resilient, aided by strong fiscal and monetary responses across countries. This has allowed companies and financial institutions to access capital to prepare for the changes of the future. At the same time the need for reform has been recognised by governments and the need for resilience in supply chains has been recognised by corporates.

India has launched a series of factor market reforms in the last year that form the foundation for materially enhancing India's appeal as a manufacturing base. Given the skill base in India, the scale of the domestic market and technology orientation, India presents an attractive option for global manufacturers. The experience of the offshored-services sector through the pandemic period also underlines the resilience of the Indian work force and its technology backbone. Despite one of the most severe lockdowns, services offshored to India continued to perform well.

The scaling up of electronics manufacturing in India was already underway prior to the pandemic. Fast paced digitisation, growing domestic consumption and the 'Make-in-India' programme had laid the foundation, and electronics production reported a CAGR of 25 per cent from USD56 billion in FY18 to USD65 billion in FY19¹. The emergence of production clusters also supports the movement of manufacturing ecosystems to India.

Leveraging this rapid growth and shift in electronics manufacturing, industrial electronics are becoming significant along with smartphone manufacturing, consumer electronics, computer hardware, strategic electronics, electronics components and LED products.

HSBC continues to work closely with policy makers, industry associations and stakeholders, to play a leading role in connecting our global corporate customers with the manufacturing opportunity presented by India. We are strategically identifying new markets and partnering with leading anchor corporates and their suppliers to support their operations in India. We see strong engagement with global anchor corporates on this subject, not just in the area of electronics manufacturing but, in other high growth sectors as well. We are working in close conjunction with stakeholders to enable these anchor corporates, and their supplier ecosystems, to build and grow their manufacturing base in India.

With the expansion of electronics manufacturing will come job creation and an increased demand for a workforce with a different set of skills. To help address this, in a small way, HSBC India is setting out an ambitious plan to prioritise large scale skilling, innovation management, capacity building with its flagship programme – HSBC Skills for Life. The electronics sector will be critical for the second phase of this programme which will be launched in 2021 as part of our Corporate Sustainability Initiatives.

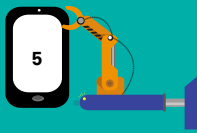
The electronics industry is leading India into a technology driven future and with this report we hope to guide you on India's capital strength, actionable insights on doing business in India, potential investment opportunities and the advantage of being part of the country's USD5 trillion economy by 2025.²



Surendra Roshia

**Group General Manager and CEO
HSBC India**

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1. MEITY Annual Report 2018-19, Make in India, DGCI&S, News Reports, Invest India
 2. India's aim of being a \$5 trillion economy 'challenging' but 'realisable': Nirmala Sitharaman, The Economic Times, July 16, 2019, accessed on November 24, 2020



Foreword - KPMG in India

While the pandemic has caused untold economic and humanitarian hardships, it has also yielded vital lessons and in some cases, opportunities to forge new paths of growth.

For example, an area of inherent vulnerability exposed by the experience of the last several months has been the risks associated with single-source supply chains. Indeed, the diversification of global supply chains presents a silver lining for India to enhance the levels of domestic and foreign direct investment and employment generation. It has also underlined the role of digital transformation in promoting not just greater efficiency, but equity as well.

The Indian government has responded to the unfolding crisis with a series of measures aimed at boosting the economy, including a stimulus package worth INR20 trillion (USD260 billion). The government is also believed to be considering more such reforms including incentives to promote India as a credible partner within global supply chains and further relaxations in foreign investment rules³. These measures are directed towards reviving growth and the early indicators are positive. Manufacturing activity expanded at its fastest pace in eight years in September, offering businesses and investors a much-needed dose of encouragement⁴.

As part of its wider manufacturing push, or the 'Make in India' initiative, the government aims to create 100 million new jobs in the sector by 2022, and also increase the share of the sector in the country's GDP from 15 per cent as of March 2020 to 25 per cent by 2025⁵. The Electronics Systems and Design Manufacturing or ESDM segment, of which

electronics components and mobile handsets are a part, has an important role to play here.

India has the second largest smartphone market globally, with the number of users expected to increase to 829 million by 2022⁶. This rapid expansion has been largely spurred by increasing local manufacturing that has led to reduced prices. As of this year, India has become the second largest mobile phone manufacturing hub in the world⁷.

To provide a fillip to this sector and attract further investments into mobile phone manufacturing and electronic components, the government recently announced a Production Linked Incentive (PLI) scheme. The companies awarded incentives under the scheme are expected to generate a total production of INR10.5 trillion (USD142 billion) in the next five years, of which exports will contribute about INR6.5 trillion (USD88.5 billion), or around 60 per cent of overall production. They are also expected to bring additional investment in electronics manufacturing to the tune of INR110 billion (USD1.5 billion) and create more than 200,000 jobs in next five years along with nearly three times that amount in indirect employment opportunities⁸.

In this context, we're delighted to partner with HSBC to present our report titled '**Powering up: Electronics manufacturing in India**'. Evaluating India's intrinsic advantages as a mobile manufacturing hub, this report studies the landscape for investment in the sector. The approach and recommendations outlined here are shaped by KPMG in India's deep knowledge of the mobile manufacturing space and broad sectoral experience. We are certain you will find this a timely and insightful read.

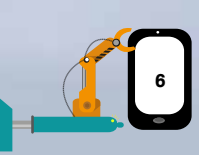


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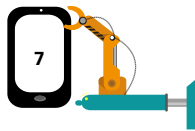
3. Govt considering series of measures to boost economy, Hindustan Times, September 11, 2020
4. IHS Markit India Manufacturing Purchasing Managers' Index (PMI)
5. RBI and Make in India website accessed on 1 November 2020
6. Contribution of smartphones to digital governance in India, India Cellular and Electronics Association, July 2020
7. "India now second largest mobile phone manufacturing hub in the world: Ravi Shankar Prasad", June 01, 2020, Indian Express
8. PLI Scheme to herald a new era in mobile phone and electronic components manufacturing, Ministry of Electronics and IT, October 6, 2020



1

Introduction





Apart from propagating a catastrophic global health and economic crisis, the coronavirus can also lay claim to being the great accelerator of our times. There has been a faster progression of several trends – most notably on the integration of digital technologies – as COVID-19 upended conventional ways of living and working. Equally, it also exposed deep inefficiencies and weaknesses implicit in our systems.

One such area has been the structure of global supply chains, which had become increasingly concentrated and therefore inflexible. Over the last decade or so, there has been a rebalancing of economic power in favour of China such that when the pandemic struck, China accounted for 17 per cent of global GDP⁹. As the world's factory, China has managed to create an enviable niche in global trade by not just dominating exports of most products but doing so in areas of greater sophistication¹⁰.

However, even before the outbreak of the coronavirus, the US-China trade war and South China Sea escalations had made firms wary, with many already reassessing their reliance on one geography for their manufacturing and sourcing needs. Of the 56 companies that moved bases from China in 2018-19 for example, 26 relocated to Vietnam, 11 to Taiwan, eight to Thailand and three to India¹¹.

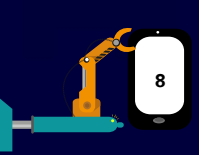
Therefore, while the 'next normal' business paradigm precipitated by this crisis continues to evolve, global production networks are undergoing an existential review: Will efficiency considerations and lowest cost determinants continue to influence supply chain configurations? Or will political, social and cultural factors also play a role in decision making? Should countries rely on free markets and focus on a narrow set of specialised manufacturing skills or invest in domestic capabilities and greater self-reliance?

In the case of telecom and handset manufacturing, India has already established itself as a credible partner for global brands. The country continues to enhance its presence and explore other areas of this value chain, while concertedly working towards building a more vibrant ecosystem around this industry. This report seeks to outline (1) the attractiveness of India as a destination for FDI in general and more specifically in manufacturing (2) why India should be the manufacturing destination of choice for telecom and handset makers, especially ones actively considering relocation, and (3) the several enabling factors including the banking, financial and regulatory frameworks that are in place to facilitate this transition.

9. Charting the Global Economic Impact of the Coronavirus, Bloomberg, February 05, 2020

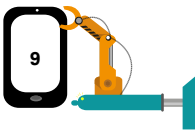
10. Supply chains: Specialisation, stronger leaders and self-sufficiency, HSBC Global Research, 27 April 2020

11. "Do it like Vietnam", The Times of India, 02 July 2020/ Nomura



2 The India replacement opportunity





India has the opportunity to cement its position as an attractive and reliable partner for companies looking to rebalance their manufacturing capabilities. Many firms from countries including the U.S., Japan and South Korea, have already expressed interest in shifting their production facilities to India.¹² The country's large domestic market, rapidly improving logistics and digital infrastructure, vibrant private sector, and supportive regulatory framework makes it a serious contender for global efficiency seeking investment, especially in manufacturing.

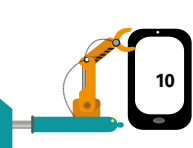
The manufacturing sector in India began its transition from operating in a shielded environment to competing in the global arena in the mid-1980s. However, it was only from the mid-1990s that this journey entered a phase of accelerated transformation when the most radical reforms towards removing barriers of entry, dismantling industrial licensing and opening the industry to global players were undertaken.

In 2014, the government's 'Make in India' initiative provided the framework to enhance domestic manufacturing through investment, innovation, and building best-in-class manufacturing infrastructure. In addition to promoting foreign direct investment and introducing various sector-specific policies around export promotion, the initiative has set a goal of increasing manufacturing output's share in GDP from 15 per cent as of March 2020 to 25 per cent by 2025¹³.



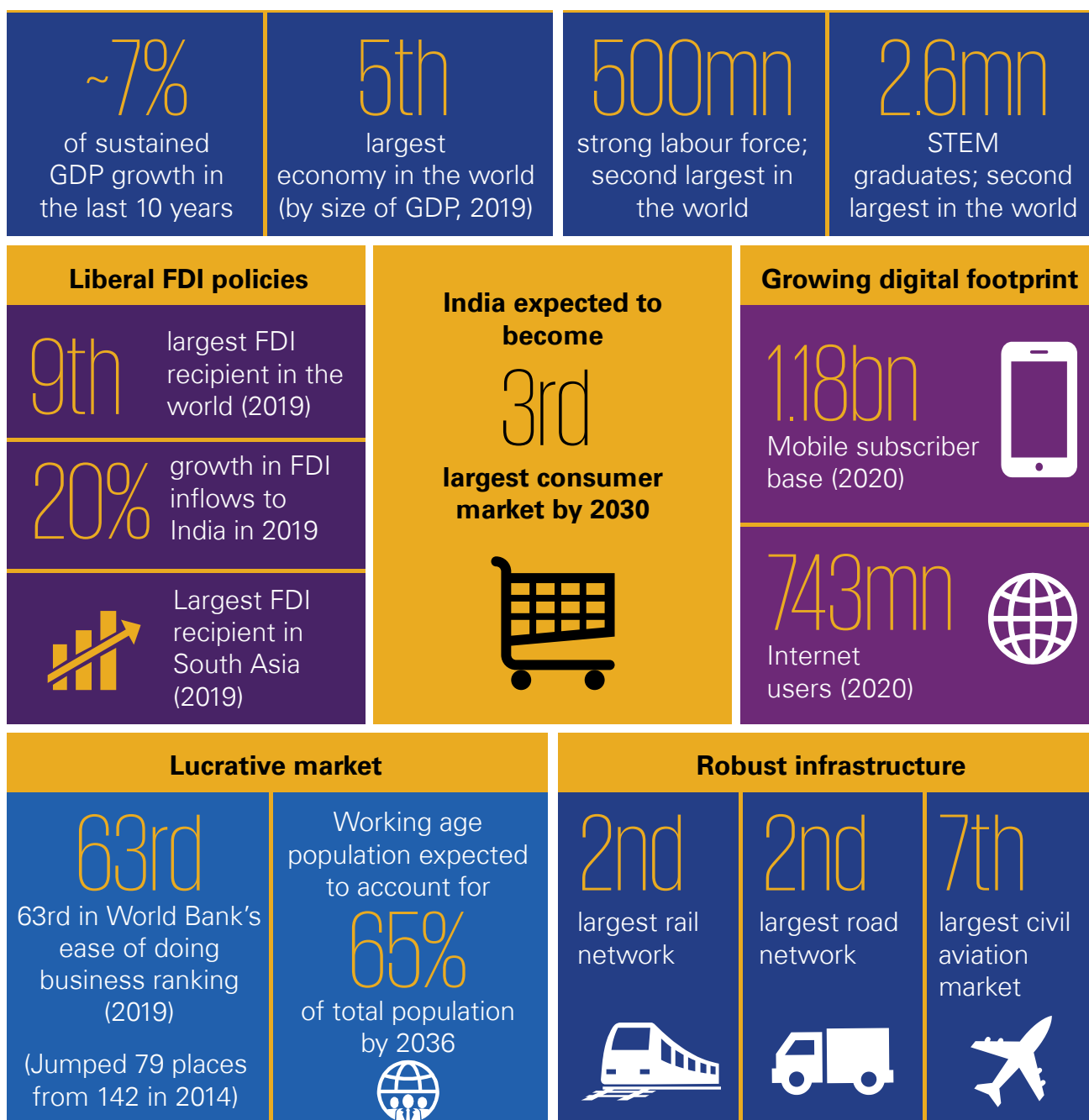
12. Japan to offer incentives to companies shifting base from China to India: Report, Mint, September 4, 2020; 'South Korean firms exiting China will look at India as an alternative destination', Business Line, April 25, 2020; With eye on firms leaving China, Karnataka forms taskforce, The Times of India, May 11, 2020

13. Make in India website, accessed on 25 September 2020



What makes India a favourable manufacturing destination?

India's economy took about 60 years after Independence to reach USD1 trillion mark in 2007.¹⁴ The economy crossed USD3 trillion in 2019, adding USD1 trillion in just five years, from 2014-19.¹⁵



Source: KPMG in India analysis, 2020 based on secondary research

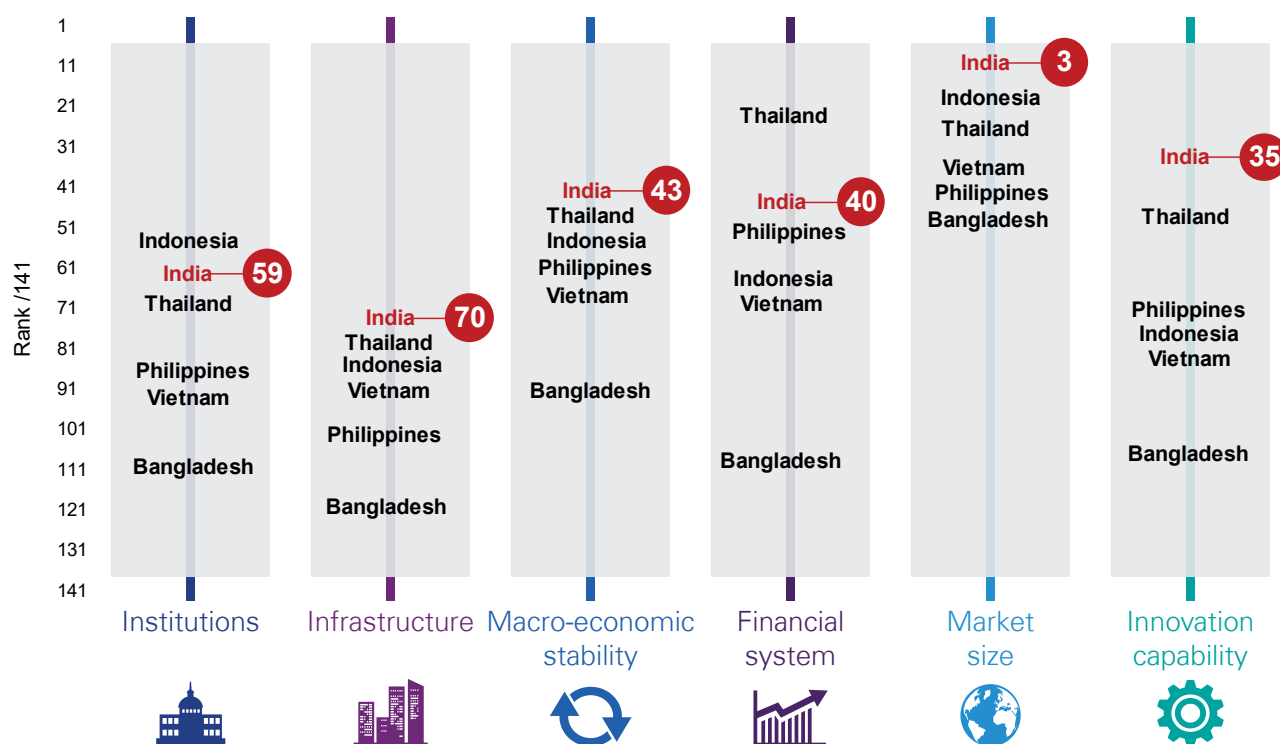
While there are other countries in Asia, including Vietnam, Indonesia and Thailand, which are aggressively competing alongside India to become the leading choice for companies' reshoring alternatives, India's ranking on the Global Competitiveness Index (GCI) is higher than its peers on most pertinent parameters. For instance, India ranks 35th (out of 141 countries) on 'Innovation

capability' and is better placed than other regional competitors in nurturing emergence of new technologies in high growth sectors.¹⁶ Further, the country's large home market provides an attractive opportunity for companies to not only setup export facilities in the country, but also to partake in the burgeoning domestic consumption market.

14. India becomes trillion-dollar economy, The Times of India, April 26, 2007

15. 'India took only five years to move from USD 2 to USD 3 trillion economy', The Economic Times, December 9, 2020

16. The Global Competitiveness Report 2019, World Economic Forum, accessed on September 29, 2020



Source: The Global Competitiveness Report 2019, World Economic Forum

Established manufacturing hubs

High potential sector

Established manufacturing hubs				High potential sector
Automobile	Industrial manufacturing	Chemicals	Pharmaceutical	Electronics manufacturing
#1	2nd	6th	3rd	2nd
Largest manufacturer of two-wheelers and three-wheelers in the world	largest producer of steel and aluminium in the world	largest producer of chemicals in the world	largest pharmaceuticals industry in the world by volume	largest producer of mobile handsets in the world
Auto components exports expected to grow at an annual rate of 23.9 per cent to reach USD80 billion by 2026	India accounts for 3 per cent of the global manufacturing output	India ranks 14th in global chemicals export	Holds 20 per cent of global generics market share, highest in the world	Demand for electronics hardware expected to reach USD400 billion by 2025

Source: KPMG in India analysis 2020 based on secondary research

Global investors' faith in India remains undeterred

India has a progressive, liberal FDI regime, with 100 per cent FDI allowed under the automatic route in most sectors including automotive, chemicals (except hazardous chemicals), pharmaceuticals (greenfield) and single-brand retailing. As a result of these initiatives, India has become one of the most attractive destinations for foreign investment over the last year. In 2019, while the FDI in developing economies in Asia declined five per cent y-o-y, to

USD474 billion, FDI flows into India increased by 20 per cent to reach USD51 billion.¹⁷

Global investor's faith in India has remained undeterred even through COVID-19. Between April-July 2020, the country witnessed inflows worth USD20 billion¹⁸ and as the country deepens its integration into global supply chains, FDI inflows are likely to grow even further in the years to come.

India has become the R&D hub of the world

~70 per cent of new global business service centres opened in India in 2019 were for Engineering and R&D



Driving innovation using cutting-edge technologies

3,500+ IoT patents filed in the last five years from R&D centres of global companies



Corporate tax rate to provide significant PAT savings

~17 per cent effective tax rate; up to 60 per cent lower than previous tax regime for new manufacturing units



Greater focus on improving logistics costs

15-20 per cent reduction in travel cost and time post-GST and e-way bill introduction

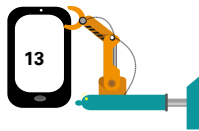


Source: KPMG in India analysis, 2020 based on secondary research



17. Investment flows to developing countries in Asia could fall up to 45% in 2020, UNCTAD, June 16, 2020

18. India received foreign investment of \$20 billion amid pandemic: PM Modi at India-Idea's summit, Business Today, July 23, 2020



Creating an enabling environment

From lowering corporate tax rates for new manufacturing companies to 17 per cent¹⁹ (amongst the lowest in emerging markets) to identifying a total area of 461,589 hectares²⁰ (about twice the size of Luxembourg) across the country to attract foreign manufacturing companies, India is taking several measures to gain a competitive edge over other economies in Asia.

The country plans to spend USD1.4 trillion from 2020-25 on infrastructure projects to improve last-mile connectivity, which is likely to reduce goods' transportation time from days to hours.²¹ To achieve effective integration between industry and infrastructure and further improve connectivity in the country, Dedicated Freight Corridors (DFCs) are being developed. These 'freight-only' corridors are likely to substantially improve the movement of goods between different regions in the country.

There are also other enabling factors alongside that support the India replacement story including the fact that the country is home to the second largest digital citizenry in the world, after China, with a reported 743 million internet users²² as of September 2020. As per KPMG in India's analysis, India is set to be home to a billion digital users by 2028²³. English is the second most widely spoken language after Hindi and as per the 2011 census, while a relatively small number of 256,000 people claimed English as their mother tongue (primary language), it was the second language of 83 million Indians²⁴. Finally, India has a demographic advantage over many countries, including China, with a young population whose median age is 28.4 years (compared to 38.4 years in China for example)²⁵.

Conclusion



The incremental change the country has witnessed over the past few years is formidable and India has been rewarded with growing foreign interest and investment. With a goal of creating 100 million new jobs in the manufacturing sector by 2022 and availability of a conducive environment to realise this goal, India is on track to becoming a global manufacturing hub.²⁶

It is important to acknowledge here that while the case for a rebalancing of supply chains seems straightforward, its execution is less so given the significant 'pull' factors that typically support the status quo.

For example, access to factors of production – in their desired quantity and quality – including labour, capital and raw materials cannot be easily replicated. Further, as more companies from a particular sector form a geographical cluster, there are strong positive network externalities on account of the larger scale of production. Logistics costs are bound to fall with higher volumes. On the other hand, 'push' factors, such as relative cost of resources, are more easily manipulated and therefore, also less defensible. When 'pull' factors exert greater influence than the 'push' factors, re-shoring is more of a challenge.

19. Nirmala Sitharaman slashes corporate tax to fire up economy, market responds with a massive surge, The Economic Times, January 16, 2020

20. India makes a move on companies leaving China, offers land twice the size of Luxembourg, Financial Express, May 4, 2020

21. India to spend USD 1.4 trillion on infrastructure in next five years: Nirmala Sitharaman, The Economic Times, October 19, 2019

22. TRAI September, 2020

23. A year off script: Time for resilience, KPMG in India, 2020

24. "In India who speaks English and where?" Mint, 14 May 2019

25. United Nations Population Division 2020

26. Manufacturing Sector in India, IBEF, accessed on October 8, 2020



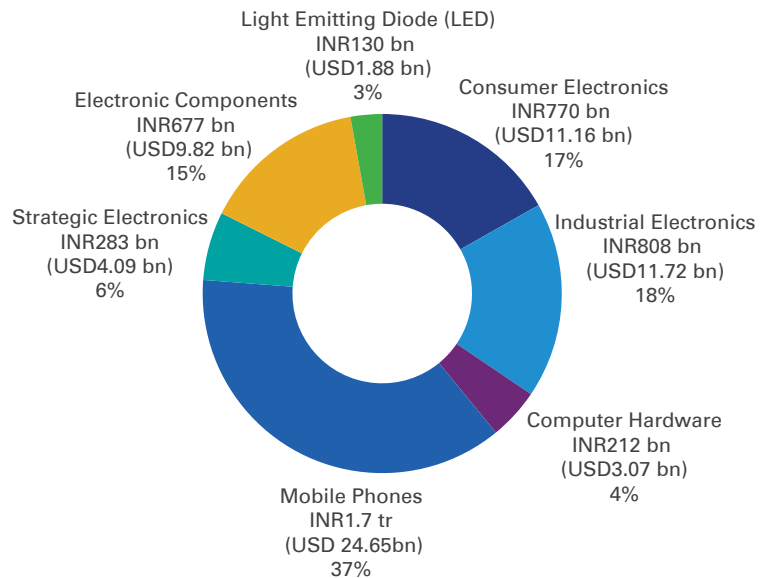
3 ESDM in India: Manufacturing for the world

Mobile technologies and services generated 4.7 per cent of the world's GDP, a contribution of USD4.1 trillion in 2019²⁷. As of June 2020, there are about eight billion mobile subscribers globally and this is expected to reach 8.9 billion by 2025. The unique number of mobile subscribers is as high as 6.3 billion, which accounts for approximately 81 per cent of the world's population.²⁸

Smartphones have become ubiquitous in the hands of users across ages, cultures and socio-economic statuses. They accounted for about 70 per cent of all mobile phone subscriptions globally with around 5.5 billion smartphone users at the end of 2019²⁹. Smartphone users are expected to reach 85 per cent of all mobile phone users by the end of 2025³⁰.

While rapid technology advancements, rising disposable income, numerous use cases and increase in on-demand content have led to the popularity of smartphones as personal lifestyle devices, the category was not immune to the effects of the global pandemic in 2020. COVID-19 resulted in a decline of smartphones sales by 20 percent³¹.

Production profile of electronics sector in 2018-19



Sources: MeitY Annual Report 2018-19

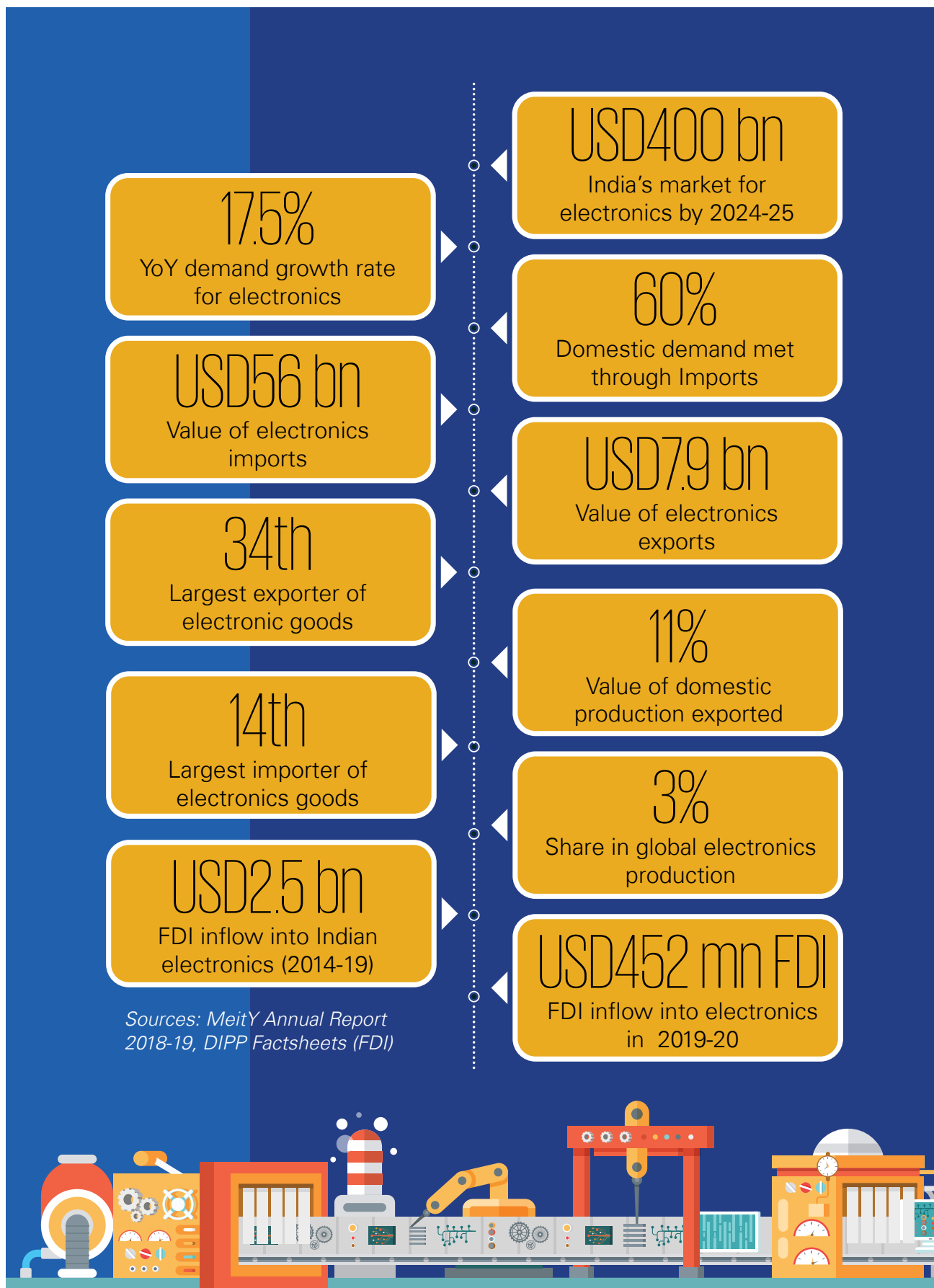
27. The Mobile Economy, 2020, GSMA Intelligence

28. Ericsson Mobility report, June 2020 and KPMG Analysis

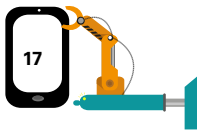
29. Ericsson Mobility report, June 2020

30. Ericsson Mobility report, June 2020

31. Gartner



Sources: MeitY Annual Report 2018-19, DIPP Factsheets (FDI)



Impact of COVID-19 on the mobile handset market in India

While the lockdown brought much of the economy to a halt, it created new demand for communications services: work-from-home, remote education, home entertainment, and isolated citizens reaching out to friends and family all leveraged India's credible telecom infrastructure.

However, from a handset and components manufacturing perspective, the disruption in global supply chains and suspension of manufacturing have significantly impacted the sector. According to the Indian Cellular and Electronics Association (ICEA), domestic manufacturers may incur losses to the tune of nearly INR150 billion (USD2.012 bn) due to suspension of production. The recently concluded festive season sales by e-commerce players has provided some encouragement for the sector

with one platform recording two times growth in customers within the mobile category and a growth of more than three times in the premium segment of smartphones. This pick-up in demand coupled with the strong interest shown by global brands in setting up manufacturing facilities in India augurs well for the sector, which should see robust growth in volume sales and maturing of the overall ecosystem in the near future.



The Indian telecom and handset market

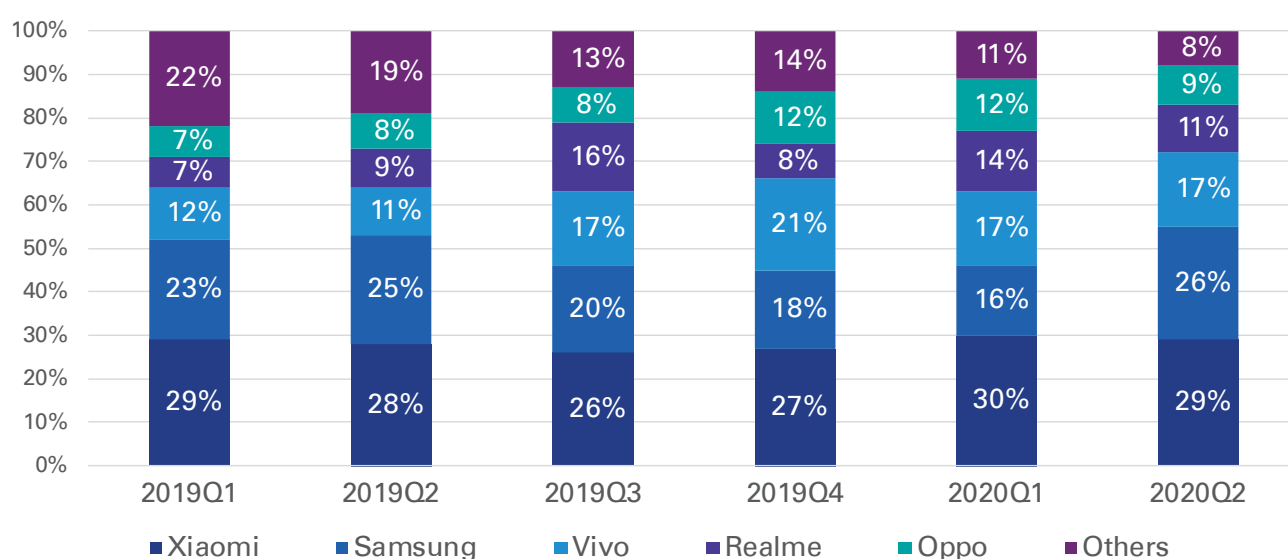
India has one of the fastest growing market for digital consumers with more than 1.18 billion connections and 743 million internet subscribers³². It is the second largest telecommunications market in the world as of March 2020. The country has witnessed a major technology transformation in the last five years and is the second fastest digital adopter among 17 major digital economies³³.

It is home to over 500 million unique smartphones devices³⁴ with smartphone shipment in Q2 2020 at 18.2 million units³⁵, accounting for approximately seven per cent of global shipments. Smartphones

account for 45 per cent of the market in India³⁶ with feature phones continuing to be popular with the majority, primarily on account of their low entry prices.

Smartphone shipments, however, surpassed feature phone shipments for the first time in 2019. India became the second largest smartphone market in the world, ahead of the U.S., with 158 million units shipped in 2019 growing at seven percent year-on-year³⁷.

The Indian smartphone market follows global trends and is home to leading mobile handset brands.



India smartphone shipments market (Q1 2019 – Q2 2020)³⁸

32. TRAI Performance Indicator report, September 2020

33. "Digital India: Technology to transform a connected nation", McKinsey Global Institute, accessed on 4 October 2020

34. Counterpoint research, 18 August 2020

35. IDC Website, accessed on 22 October 2020

36. Economic Times article: Overall India handset market growth to fall in 2020; accessed on 24th October

37. Counterpoint research, accessed on 22 October 2020

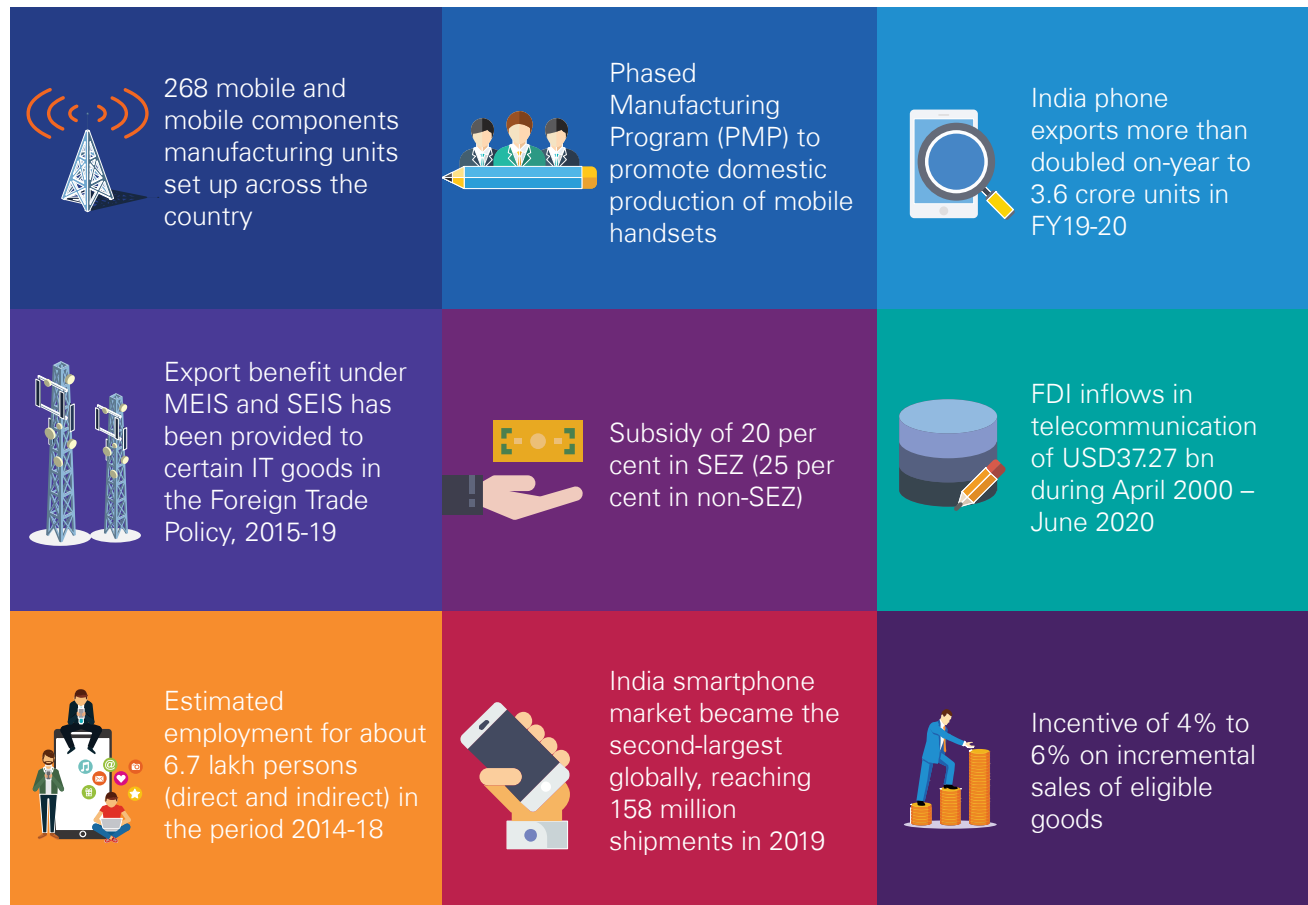
38. Counterpoint research, accessed on 22 October 2020



Handset and component manufacturing in India

The annual production of mobile phones in India has increased from 60 million units valued at INR189 billion (USD2.58 bn) in FY15 to an estimated 320 million units valued at INR2,250 billion (USD30.68 bn) in FY20³⁹.

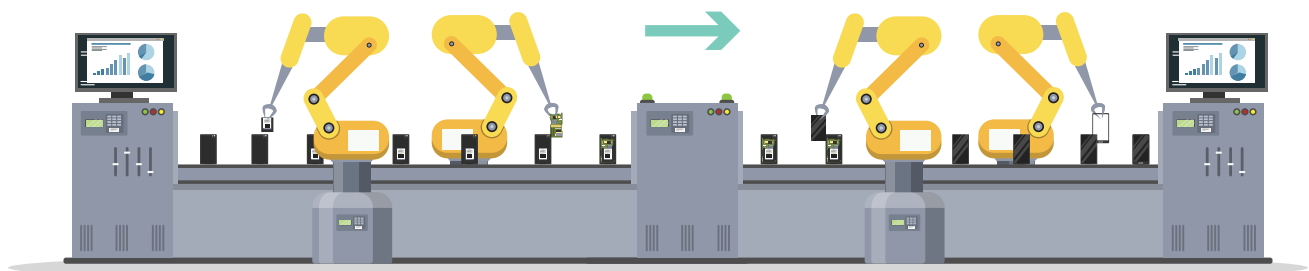
Handset and components manufacturing in India – An overview



Sources: NPE 2019, Ministry of Commerce, MEITY Annual report 2019, Counterpoint research and DIPP Fact Sheet

As per the Union Electronics and Information Technology Minister, Hon. Ravi Shankar Prasad, in the past five years, over 200 manufacturing units have been set up making India the second-largest mobile phone manufacturer in the world. India exported 36 million units of smartphones in FY20 as

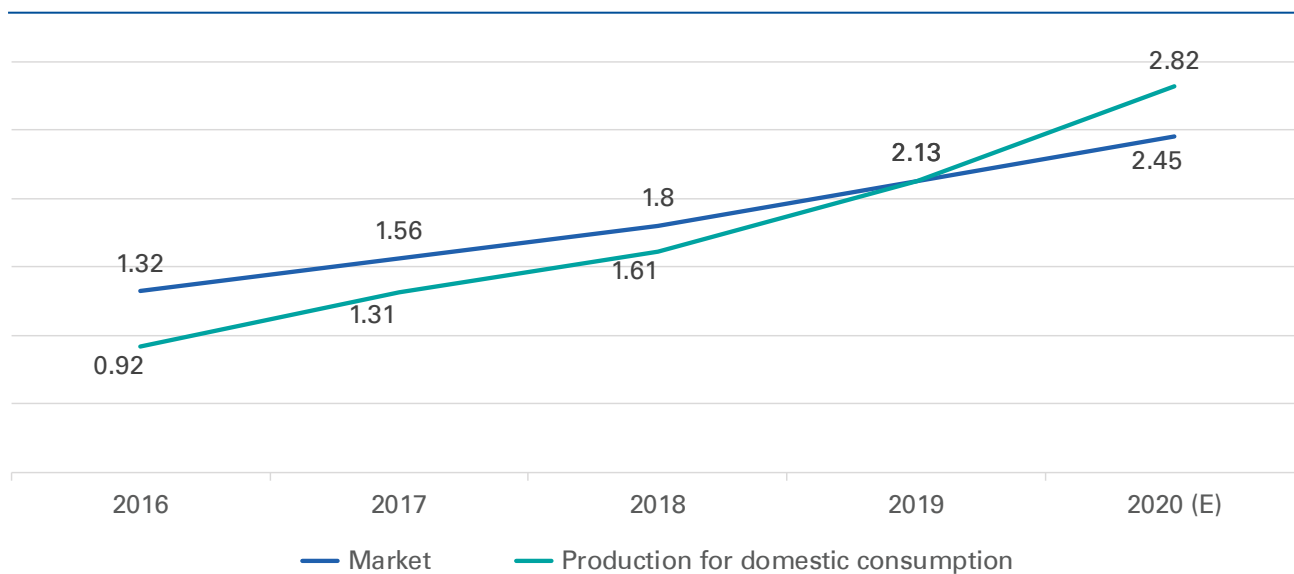
compared to 17 million units in FY19 which translates into a 111.76 per cent growth. In terms of value, smartphones worth INR210 billion (USD2.85 bn) were exported with a growth rate of 91 per cent in FY20.⁴⁰



39. Mobile phone manufacturing in India: Towards a brighter future! IBEF, accessed on October 3, 2020

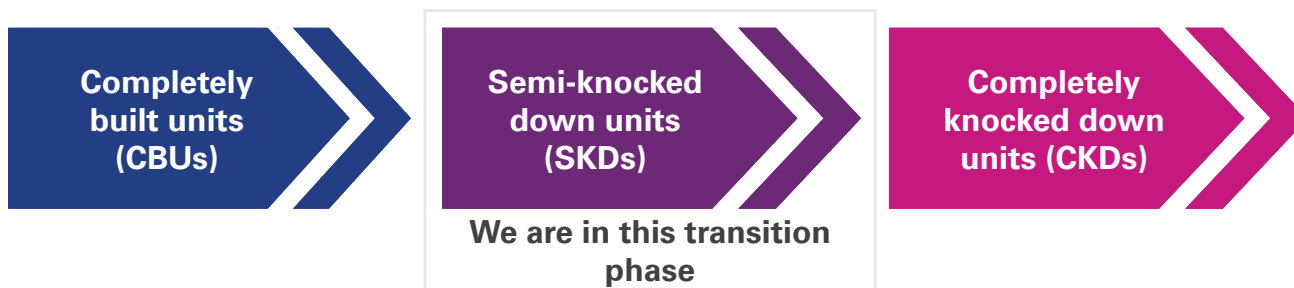
40. "India emerges as the second largest mobile phone manufacturer in the world: Ravi Shankar Prasad", Times Now, June 2, 2020 accessed on 5th October 2020

Indian handset market vs production (in INR billion)⁴¹



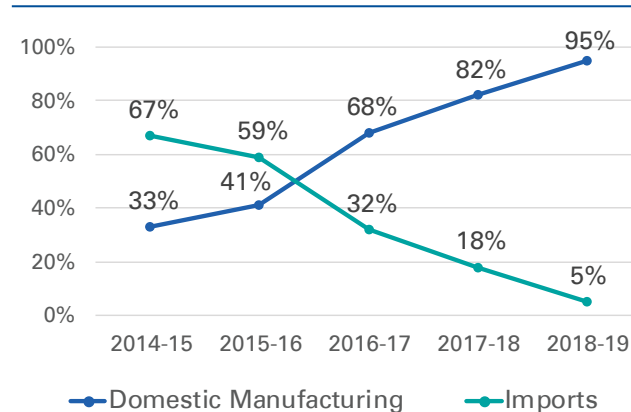
The growing domestic handset manufacturing market and supportive policies introduced by the government have ensured that India has steadily built on its mobile handsets manufacturing capabilities. Domestic manufacturing of cellular mobile handsets and its sub-assemblies/ parts has emerged as one of

the flagship sectors under the government's 'Make in India' initiative. As a result of the implementation of the Phase Manufacturing Plan (PMP), the sector is steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level of manufacturing.⁴²



While top global handset manufacturers such as Samsung, Xiaomi, Vivo, etc. have established their presence in India with assembly operations, the components manufacturing ecosystem is still comparatively nascent. These units continue to import a significant number of components and other raw materials as their availability in India is limited. However, of late imports into this sector are increasingly SKDs or smaller components rather than as completely built units (CBU), which signals a healthy shift from a consumption economy to a manufacturing focussed one.

Handset import trends⁴³



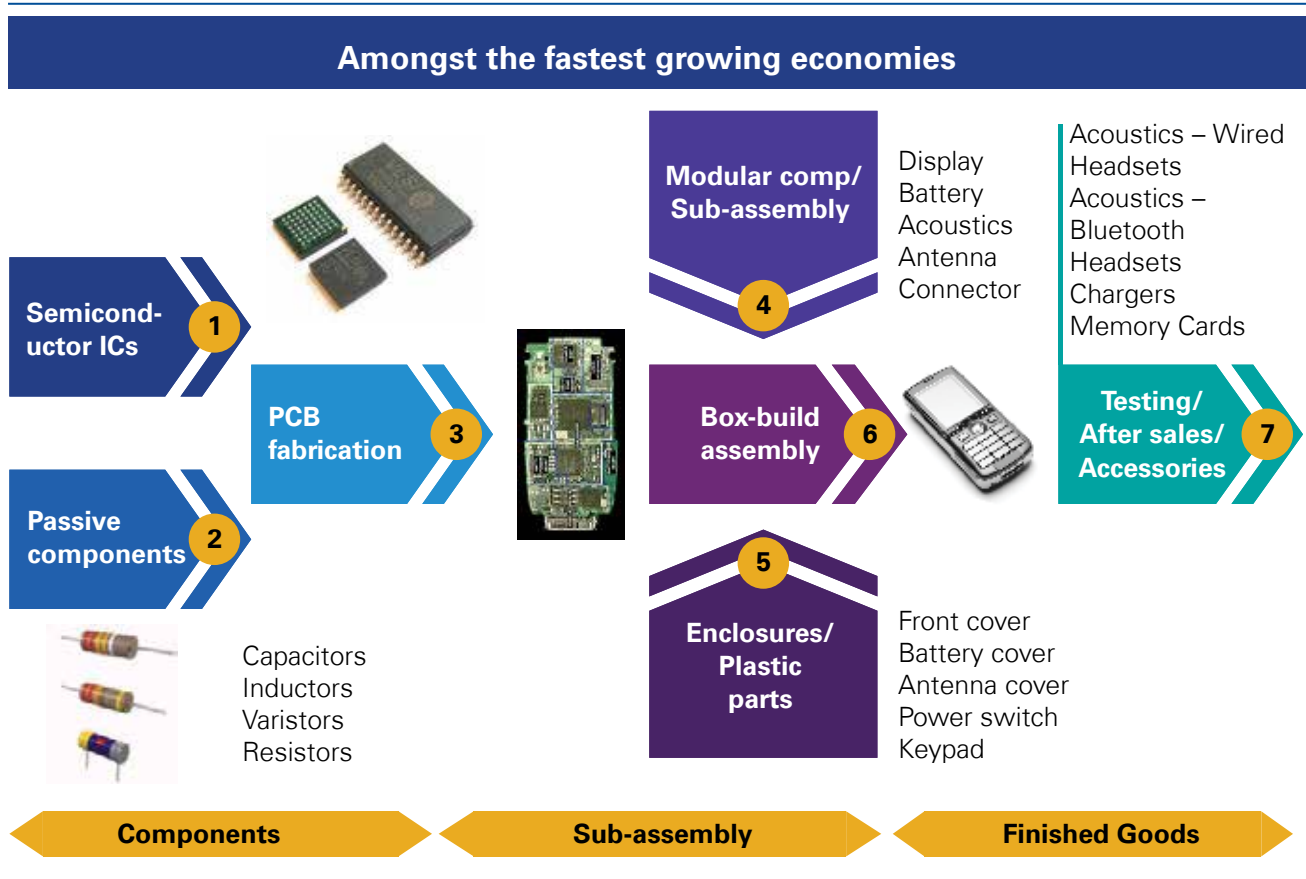
41. ICEA and KPMG Report on Open OS Ecosystem and its impact on OEMs/ODMs

42. MEITY Annual report 2020

43. ICEA and KPMG Report on Open OS Ecosystem and its impact on OEMs/ODMs

Segmenting the handset manufacturing market

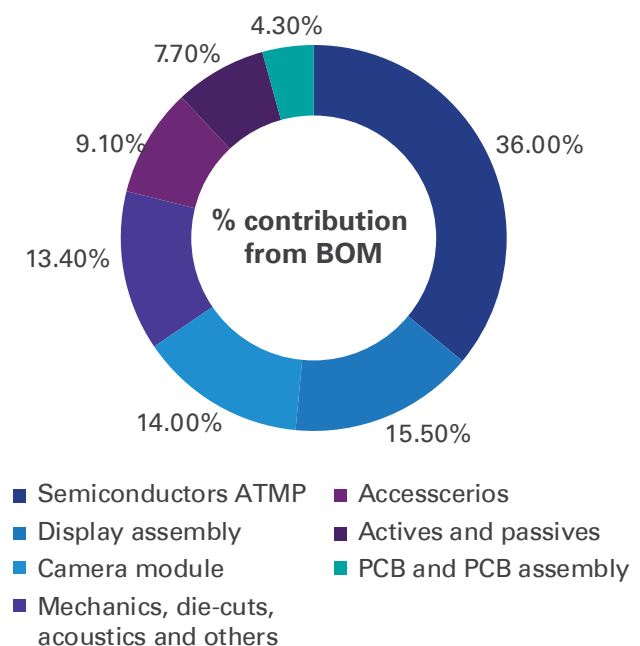
The handset manufacturing market is sub-divided into finished goods, sub-assemblies and components manufacturing. The Indian mobile components manufacturing and assembly market was worth USD30.8 billion in 2019⁴⁴ and is still considered to be in its growth stage.



Currently, the manufacturing capabilities for key components of smartphones such as gift boxes, assembling programming testing and packaging (AFTP), chargers/ adapters, battery packs, wired headsets, die cut parts, mechanics, keypads, USB cables, PCB assembly already exists in India. The contribution of these sub-assemblies to a typical bill of material of an average priced smartphone is estimated at about 67.5 per cent⁴⁵.

The localisation at the component level is however much lower when compared to the sub-assembly level. Components such as chipsets, PCBs, display assemblies, camera modules and image sensors contribute a significant part of the handset costs and these are not manufactured in India. They continue to be imported from China, South Korea, the U.S., Vietnam and Japan.

Components of a typical Bill of Material (BoM) of an average priced smartphone⁴⁶



44. IMARC research report

45. ICEA

46. ICEA and KPMG in India analysis 2020

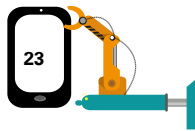
Contribution of sub-assemblies to the BoM of a smartphone⁴⁷

Sub-assemblies	% BoM sourced from India
Gift box	100%
ATP	100%
Battery and charger	90-95%
PCBA	100%
Mechanics	10-15%
Display assembly	10-15%
Mic, receiver, connectors, ringer vibrator motor	0%
Camera module	20-25%

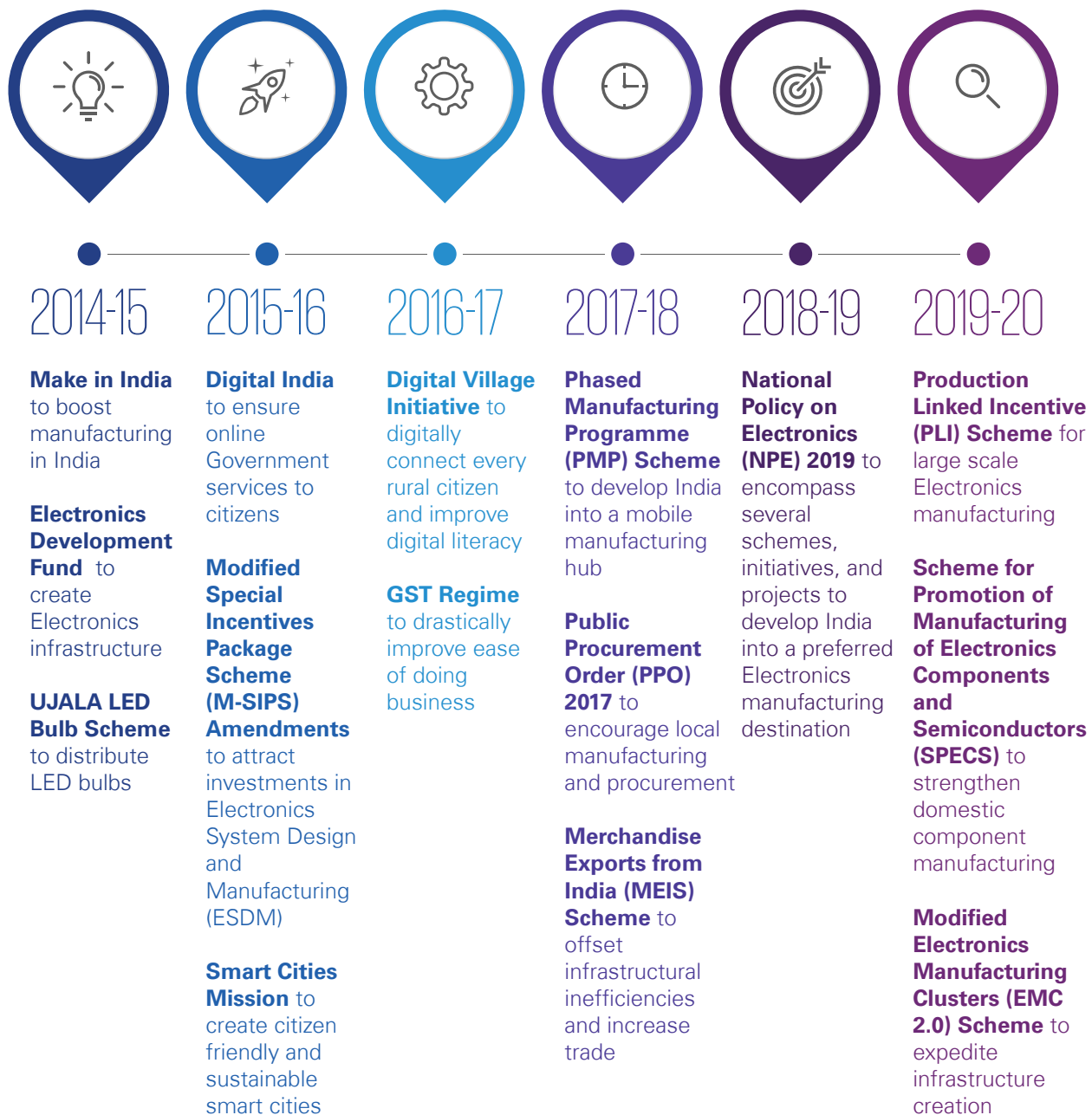
The percentage of BoM sourced from India in terms of sub-assemblies for gift boxes, ATP, battery, chargers and PCB assembly is relatively high compared to the mechanics, display assembly, acoustics and camera modules. India will need to invest in developing these capabilities to provide a more comprehensive suite of sub-assemblies within the overall BoM.



47. ICEA and KPMG in India analysis 2020



Handset manufacturing attracts policy attention



Sources: KPMG in India analysis 2020 based on secondary research

The Government of India imposed considerable duties on the imports of mobile handsets and handset components such as batteries, chargers, wired headsets, etc. under the Phased Manufacturing Programme (PMP). As a result, assembly operations moved to India and spurred domestic handset sub-assembly manufacturing. However, components still continue to be imported due to the inability of domestic production volumes to meet handset manufacturer requirements.

The Ministry of Electronics and Information Technology (MeitY) recently implemented the National Policy on Electronics, 2019 to support the manufacturing of electronic products in India. The policy envisages a turnover of USD400 billion in electronic manufacturing in India by 2025⁴⁸ and the production of one billion mobile handsets valued at USD190 billion by 2025, out of which 600 million handsets valued at USD100 billion could be exported.⁴⁹

48. "New electronics policy targets USD400 billion manufacturing revenue by 2025", NDTV, February 19, 2019, accessed on 5th October 2020

49. MeitY Annual Report, 2020

Handsets and their sub-assemblies and the components manufacturing eco-system have assumed greater significance under the 'Make in India' and 'Digital India' initiatives. Other initiatives undertaken by the Government of India for this sector include⁵⁰:

- a. Imposition of 20 per cent basic customs duty (BCD) on mobile handsets to encourage replacement of imports with domestic manufacturing
- b. Implementation of the Phased Manufacturing Programme (PMP) roadmap, which has led to the imposition of BCD in the range of 10-20 per cent on notified subassemblies of mobile handsets
- c. Introduction of the Production Linked Incentives (PLI) under the National Policy of Electronics to attract global manufacturers and encourage the production of handsets and components domestically
- d. Introduction of the Interest Subvention Scheme under the National Policy of Electronics to provide interest subsidies for electronics manufacturing plants
- e. Introduction of the Credit Guarantee Fund Scheme under the National Policy of Electronics to eliminate the need for collaterals
- f. Introduction of the Scheme for Promotion of Manufacturing of Electronic Components and Semi-conductors (SPECs) under the National Policy of Electronics to attract capital-intensive components manufacturing to India
- g. State level electronic policies and incentives for electronic component manufacturing

Several other schemes such as the Modified Special Incentive Package Scheme (M-SIPS) and Modified Electronics Manufacturing Clusters Scheme (EMC 2.0) have also been introduced to provide financial incentives across the ESDM value chain to compensate for the cost disability in manufacturing within this sector. Owing to these various initiatives, India's electronics production increased from INR1,903.4 billion (USD25.12 bn) in 2014-15 to an estimated INR5,465.5 billion (USD72.14 bn) in 2019-20, a CAGR of about 24 per cent⁵¹. Since 2016-17, domestic electronic production has exceeded electronic imports, which could be an indicator of the effectiveness of these supportive policies.



Production Linked Incentive (PLI) Scheme

- The incentive scheme aims to boost domestic manufacturing and attract investments
- Offers 4% to 6% of incremental sales as incentive for a period of five years
- Target segments: mobile phones and specified Electronic components



SPECs

- Strengthen domestic component manufacturing ecosystem by incentivizing investment
- 25% incentive on capital expenditure, including R&D
- Envisaged to create 600,000 (direct and indirect jobs)



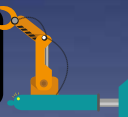
EMC 2.0 Scheme

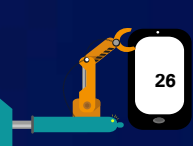
- Support setting up world-class infrastructure for electronics manufacturing
- 50% of project cost as grant subject to a ceiling of INR 70 Cr. (USD9.4 mn) for every 100 acres land
- Financial assistance for Common Facility Centers (CFCs) up to 75% of the project cost

Sources: Invest India

50. MeitY Annual Report, 2020

51. MeitY Annual Report, 2020





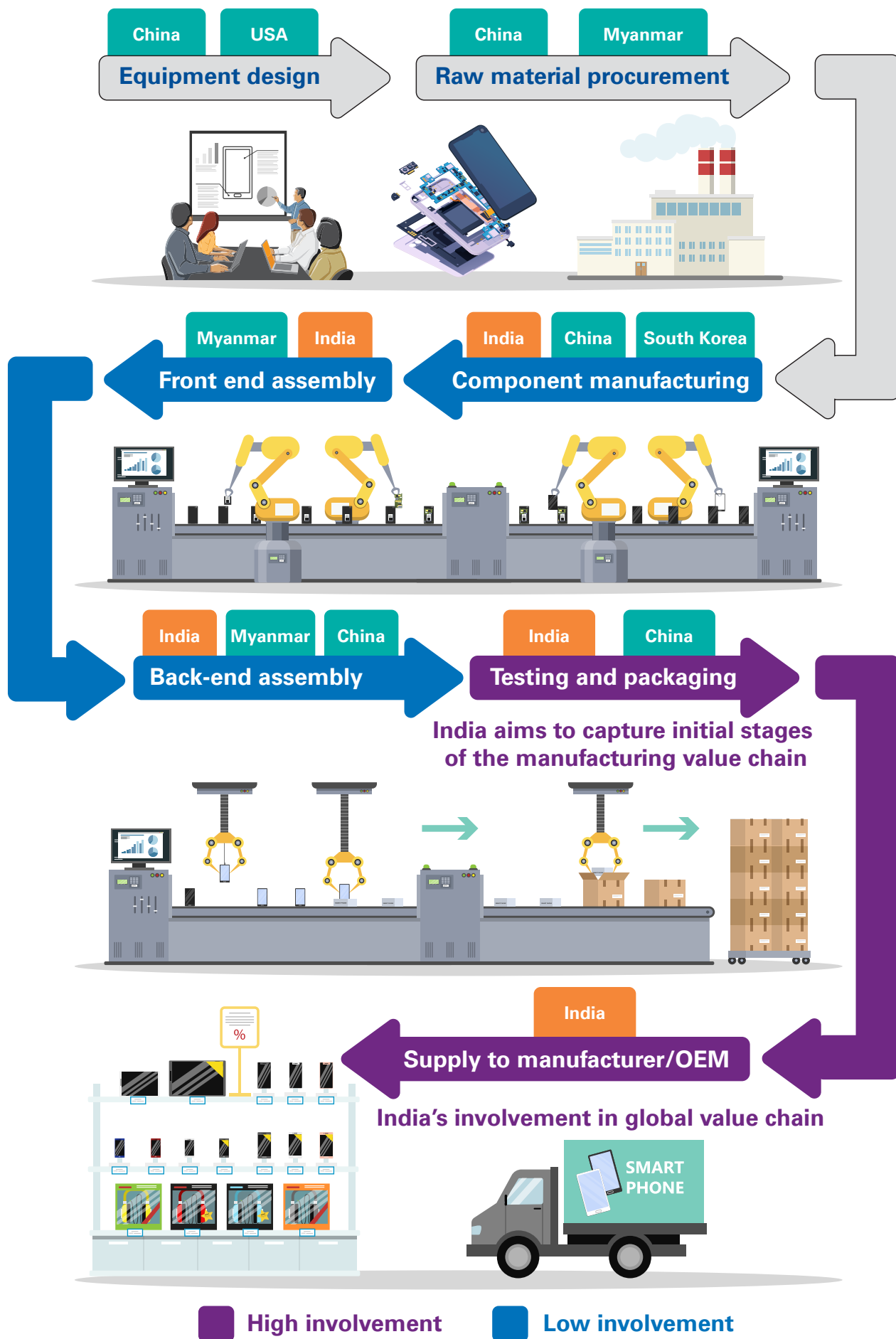
4 The maturing of an ecosystem



Over time, certain geographies have developed capabilities and renown in areas of the mobile handset value chain. While the U.S. and Japan are primary centres of design, China and Taiwan have emerged as popular locations for companies looking for maximum manufacturing efficiency.

India's presence had been originally on final assembly and testing of units rather than ideation of designs and production of components. This is due to several factors: inadequate component manufacturing ecosystem, irregular power supply and a dearth of design innovation and R&D investment by the industry. India's ability to attract sustained foreign interest and investment into the sector was compromised on account of the country occupying the latter stages, less sophisticated parts of the value chain. However, India's influence and involvement in the global mobile handset value chain is expanding on account of several favourable government policies that are directly targeted at developing the ecosystem in the country.





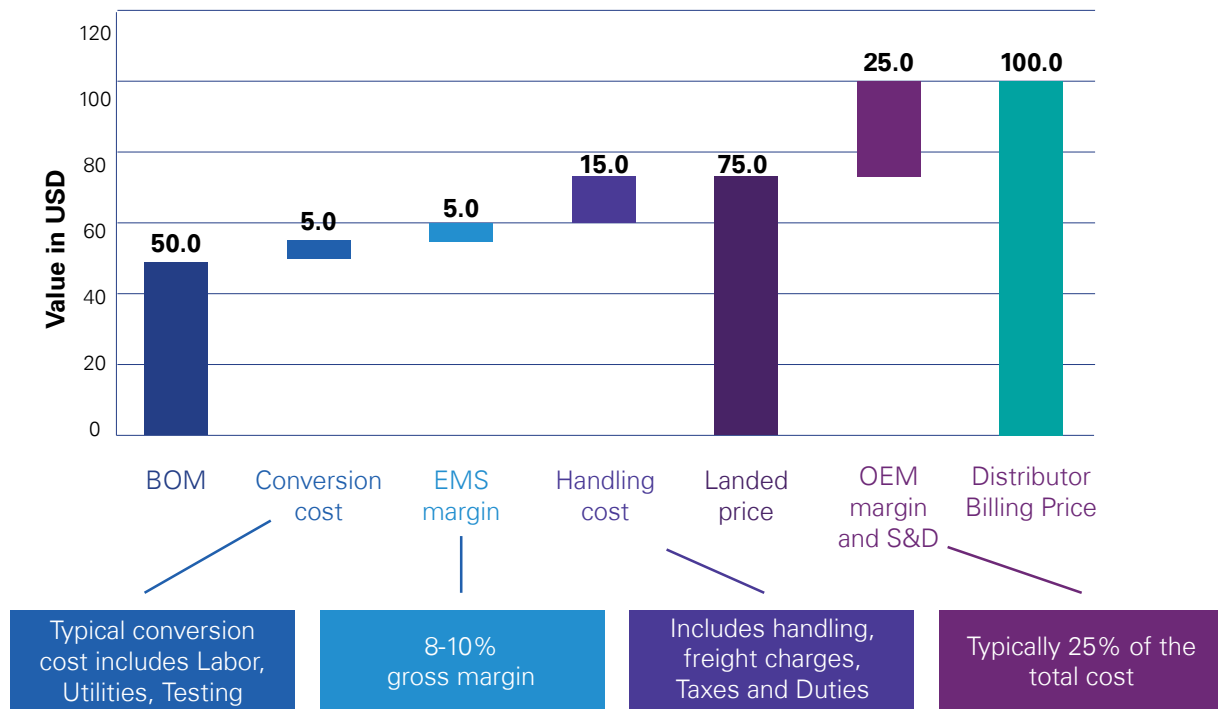
Current challenges faced by component manufacturers

- **Low value addition:** Despite the rise in domestic demand and presence of leading global mobile handset brands, high value components such as display units, camera modules, etc. are still imported for the assembly units in India. Currently, India manufactures lower value add components such as chargers, batteries etc.
- **Intense global competition:** Many nations are vying to attract investment into their economies for the manufacture of high value components for mobile handsets and there are considerable barriers to entry for new players in India.
- **Lack of an integrated supply chain:** One of the major setbacks to the indigenous manufacturing in the country is the lack of the integrated supply chain/ value chain. While there are several factors including a lucrative domestic market and an enabling regulatory environment that can support domestic manufacturing in mobile handsets, the growth of this sector is critically dependent on the presence of an integrated value chain.
- **Reliable infrastructure and resource availability:** The manufacture of mobile handset components requires the assurance of uninterrupted power availability, clean water etc. that are not always readily available.
- **Stringent financial criteria:** The manufacture of high value add components for mobile handsets requires the installation of large manufacturing plants and investment in costly machineries. The associated return on the capital employed (ROCE) is also generally lower and requires financial incentives to be in place in order to raise the required funding from private sources.
- **Availability of skilled labour:** Such large manufacturing plants and complex machineries require skilled labour to operate. India will need to invest in upskilling its workforce to meet these requirements.

Addressable market across the value chain

The mobile handsets and components market in India is expected to reach INR14 trillion (USD190 bn) by 2025⁵². In this section, we analyse the implications for each segment of the value chain in terms of addressable market opportunity.

The indicative price build-up for a handset retailing at USD100 in India is as follows:



Sources: KPMG in India analysis 2020 based on secondary research

52. MeitY annual report 2020

As per KPMG analysis, considering the estimated INR14 trillion (USD184.79 bn) market size for handsets by 2025, the addressable market for OEMs after deducting the branding, after-sales, retailer mark-ups and accessories cost would stand around INR10,000-11,000 billion (USD131.99-145.19 bn). The addressable market for components manufacturers after deducting the conversions cost, handling charges, margins, etc. is estimated at around INR6,500-7,500 billion (USD85.79-98.99 bn).

Estimated total market for handset manufacturing:
INR14,000 billion (USD184.79 bn)

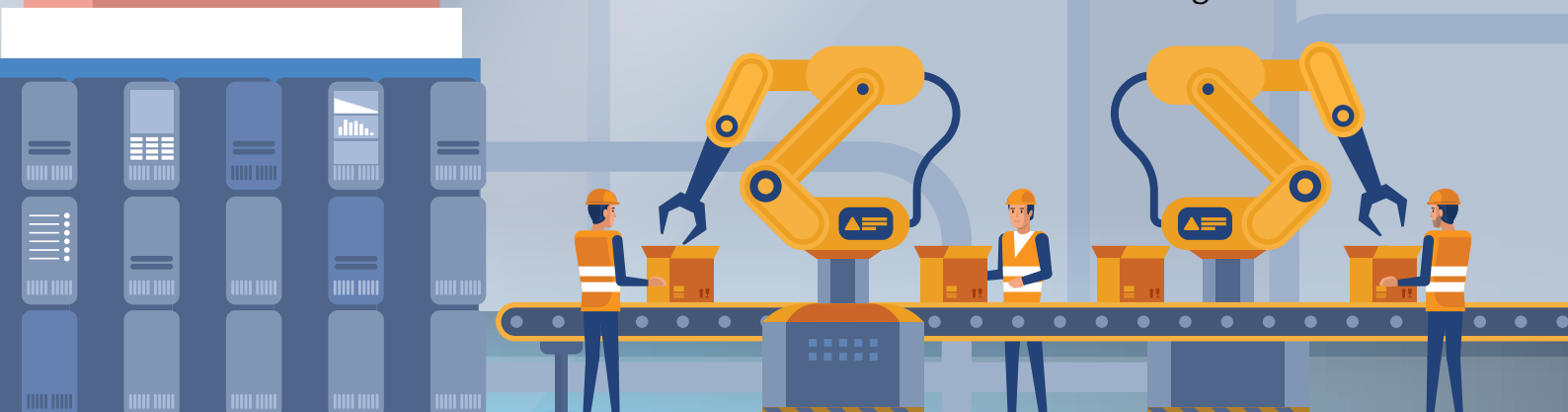
Less: After sales, Margins and Accessories cost

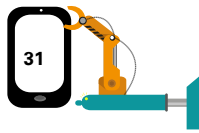
Addressable market for OEMs: INR10,000 to 11,000 billion (USD131.99-145.19 bn)

Less: Cost of operations and assembly

Addressable market for Raw Materials/ Components Manufacturers:
INR6,500 to 7,500 billion (USD85.79-98.99 bn)

By any stretch, this is a large and attractive market and India offers an enviable opportunity for handset and components manufacturers to establish the manufacturing units in India.





A roadmap for localisation

India can leverage this opportune moment and capitalise on several existing strengths as well the shifting, post COVID-19 geo-political sentiment to become a global leader in the handset, components and electronics manufacturing industry.

Some of the enabling factors at this time for India include:

a. A post-COVID-19 reality: Global supply chains are undergoing a radical reconfiguration against the backdrop of the COVID-19 pandemic, rising economic nationalism across the world and significant geopolitical shifts. The pandemic has highlighted the risks a single-source supply chain carries, as companies across the world have faced disruptions to the flow of materials from China, the initial epicenter of the pandemic. Geopolitical and trade tensions between the U.S. and China have also simmered in recent months, turbocharging the push to diversify supply chains⁵³. As multinational companies seek to relocate their global supply chains, emerging economies such as India are increasingly seen as attractive sourcing destinations.

b. Ease of doing business and regulatory support:

With India continuously improving its ease of doing business and the launch of several attractive government initiatives such as the Production Linked Incentives (PLI), export incentives, Phased Manufacturing Program (PMP), M-SIPS, Make in India, Digital India, etc. alongside the visionary National Digital Communications Policy (NDCP), FDI in to the country – and especially into electronics manufacturing – is sure to rise.

c. Geo-political advantage: The trade war between the U.S. and China resulting in tariffs being raised on both sides offers India an ideal scenario to leverage the proactive steps already undertaken by the government and attract global brands looking to establish alternate manufacturing units and diversify their supply chains.

d. Electronics at heart of world trade: The electronics industry is always at the forefront of innovation and India, with its progressive policies and frameworks, has rightfully kept electronics hardware manufacturing as a special focus area.

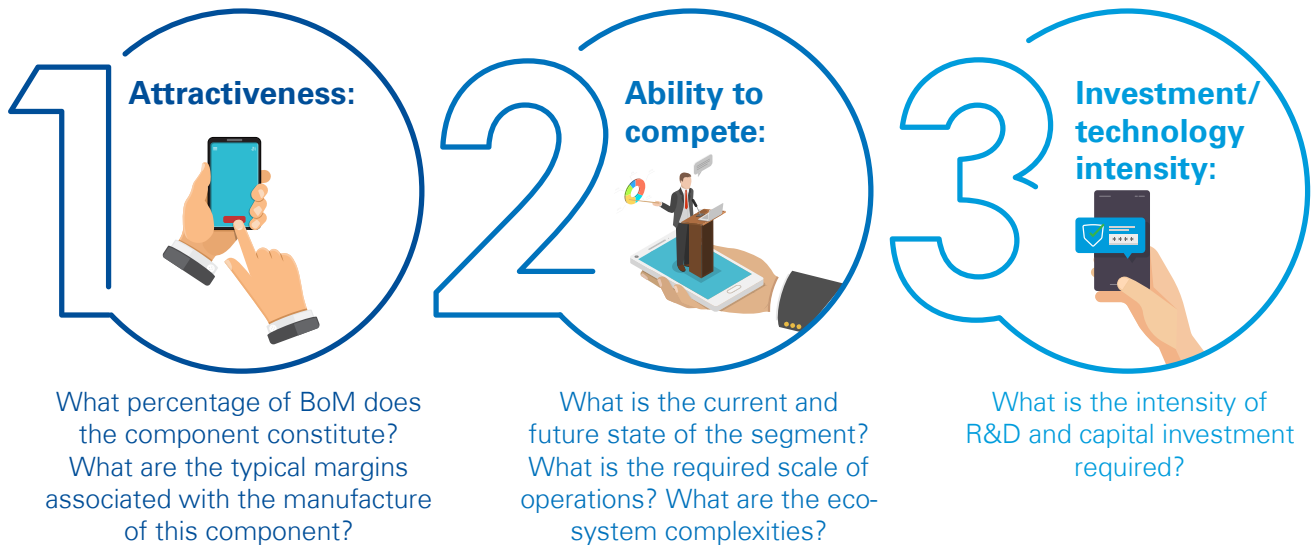


⁵³. Trump administration pushing to rip global supply chains from China: officials, Reuters News, May 4, 2020

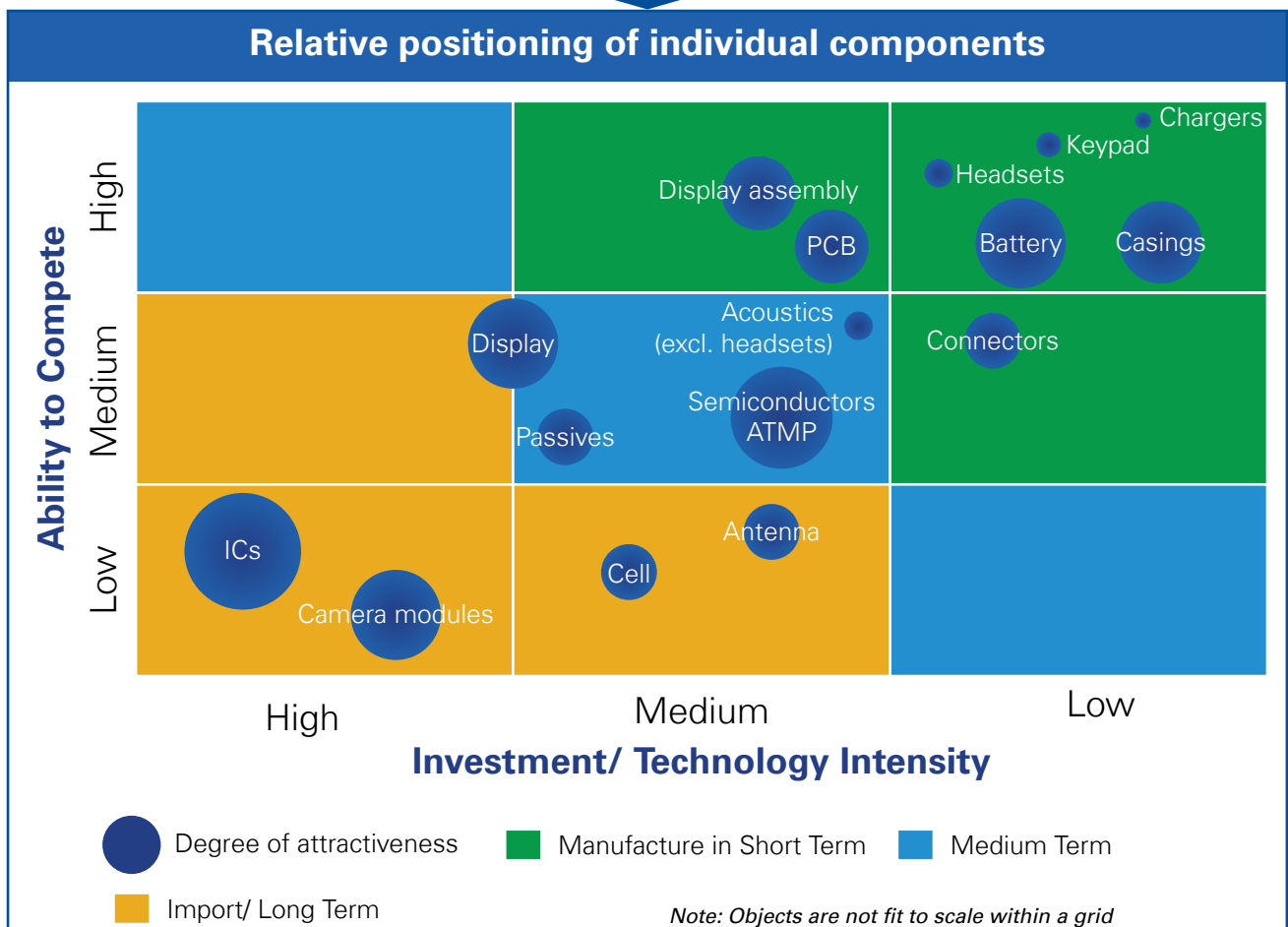
A framework for strategic decision making

Domestic mobile handset manufacturing companies are faced with the proverbial “where to play” question as there are a number of attractive product segments with each requiring a unique

level of capabilities and investments. The strength of incumbents and intensity of competition are additional factors to be considered. Broadly, the following three areas will need to be assessed:



Based on the evaluation of components, their market attractiveness, ability to compete and investment requirements, KPMG in India has summarised the path to localisation into three areas:



- **Short term localisation:** These products offer the most obvious opportunity for domestic manufacturers as not only is there existing, strong capabilities in this space, but initial investment requirements are also relatively lower. KPMG in India has identified **display assembly and PCBs** as two among this group of components that can be considered for integration of sub-assembly in India. Both these offer a sizeable market with a relatively lower intensity of investment. While PCB manufacturing is already underway in the country, India still needs to develop the High Density Interconnector (HDI) PCBs segment on a larger scale to meet the requirements of smartphone manufacturers. For display units, with the introduction of recent levies on imports, India should see a rise in domestic manufacturing.
- **Medium term localisation:** These components require moderate level of investments and the

market is home to some well-entrenched global players thereby increasing competitiveness. The strategy here could be to wait and watch and determine both the ideal time and manner for market entry. **Display fabs and semi-conductor ATMP** seem to be the most relevant medium-term opportunities for greater integration into the existing value chain.

- **Import/long term localisation:** Components such as ICs, camera modules, semiconductors, etc. require significant investments owing to the complexities in manufacturing. These components would probably continue to be imported into the country while domestic manufacturing in these segments develops alongside. India is investing in capabilities in the manufacturing of cells and antennas with an eye on manufacturing other high value components locally and this could be realistically the long-term localisation goal.



A close-up photograph of a person's hand holding a gold-rimmed magnifying glass over a document. The hand is positioned on the left, with the thumb and index finger gripping the handle. The magnifying glass is tilted, focusing on the document below. The document is white with faint, illegible text. The background is a dark, textured surface, possibly a desk or table. The lighting is warm and focused on the hand and the magnifying glass.



With a sustained focus on electronics system design and manufacturing (ESDM) over the last decade, India has gained a strong foothold in the global mobile handset market. Specifically, in the mobile phone manufacturing sphere, with recent policy reforms i.e. National Policy for Electronics, Phased Manufacturing Plan (PMP) for mobile handsets and the successful establishment of mobile manufacturing unit across four major clusters in India, the import of mobile phones into India has dropped sharply. The aforesaid initiatives were taken with a view to provide impetus to the domestic component ecosystem that was earlier lacking in the country. Consequently, India became the second largest mobile phone manufacturing hub globally, in the year 2020⁵⁴.

The recent introduction of Production Linked Incentive Scheme for Electronics Manufacturing shows significant potential, as leading electronics manufacturers from all over the world have applied to avail benefits under the scheme.

The Government received 22 applications, of which 16 applicants have been approved for claiming the benefit⁵⁵. This should provide a significant boost to domestic manufacturing and provide direct and indirect employment opportunities to approximately 800,000 people⁵⁶.



54. India second largest mobile manufacturing hub globally, The Economic Times, January 31, 2020

55. Centre approves 16 firms for PLI scheme; aims Rs 10.5 lakh cr production boost in 5 years, Business Today, October 07, 2020

56. Electronics manufacturing: Govt notifies three incentive schemes; likely to create lakhs of jobs, Financial Express, April 02, 2020

Important policy initiatives

Some of the key initiatives/ schemes undertaken by the government for this sector are:

National Manufacturing Policy (NMP)

- The NMP was introduced in 2011, with an objective to address stagnation in domestic manufacturing
- Key initiatives under the NMP include creation of 'National Investment and Manufacturing Zones', adopting green technology, increasing labour productivity, training and skill development, among others.

Make in India 2014

- The 'Make in India' programme was launched in the year 2014, to encourage companies to set-up manufacturing facilities in India, facilitate investment, and build advanced industrial

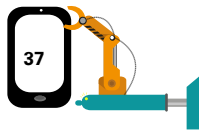
infrastructure in India, conducive to indigenous production

- Pivotal activities under the programme have been promoting ease of doing business, FDI reforms, skill development, infrastructure creation and enabling fiscal incentives.

National Policy for Electronics 2019 (NPE)

- The NPE aims to position India as a global hub for ESDM and integrate India's electronic manufacturing sector within global value chains
- Initiatives proposed under NPE include providing tax benefits to the ESDM sector, devising schemes to encourage new/ existing units, upgrading testing of electronic goods, encouraging industry-led R&D, among several others. Specifically, under the NPE, India has set a target of making one billion mobile handsets by 2025, of which 600 million would be exported.





Manufacturing incentives

With the objective to boost indigenous manufacturing of electronics and establishing India's presence within this sector at a global level, various schemes and incentives have been launched by the Government under the NPE. These incentive schemes intend to neutralise the cost of production and encourage domestic manufacturing.

Schemes	Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing	Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)
Objective	Boost domestic manufacturing, and attract large investments in mobile phone manufacturing and specified electronic components	Promote manufacturing of target segment goods including electronic components, semi-conductors, specialised sub-assemblies etc.
Incentive	Four per cent to six per cent, on incremental sale of identified goods	25 per cent of capital expenditure, on identified goods
Applicability	Manufacturers registered in India	Investment in new units, or expansion of capacity/ modernisation of existing units
Period	5-6 years	3 years
Financial Outlay of Government	INR409,510 million (USD5,557.20 mn) ⁵⁷	INR32,850 million (USD445.79 mn) ⁵⁸

Manufacture and Other Operations in Warehouse Regulations, 2019 Scheme (MOOWR Scheme)

- The MOOWR Scheme allows import of raw materials and capital goods, with the option of making deferred payment of Customs Duty, for manufacturing and other operations in a bonded manufacturing facility
- Beneficial aspect under the MOOWR Scheme, is that it does not have any requirements of export obligations being met
- The scheme has come into force from October 1, 2019

Remission of Duties and Taxes on Exported Products (RoDTEP)

- This scheme has been introduced under the FTP to grant incentive of taxes/ duties/ levies, paid on procurement of goods used for manufacturing of exported goods
- The scheme is proposed to be introduced in replacement of Merchandise Exports from India Scheme (MEIS), which is applicable till December 31, 2020
- The advantage of RoDTEP that is it further extends to certain taxes/ duties, which are not covered under the MEIS, for instance electricity duty etc.

- While the government is still to make an announcement on the applicability of the scheme, it is expected to become effective from January 2021.

Difference in duty between finished goods and parts/components

- Government has been consciously discouraging the imports of parts/ components for finished goods to incentivise domestic manufacturing. The preference has been to develop the eco-system and supply chain to make the country self-reliant. The Phased Manufacturing Plan (PMP) is one such example introduced by the Government specifically for the mobile handset industry.

Phased Manufacturing Plan (PMP) for mobile handsets

- Introduced with the objective of creating a robust manufacturing ecosystem in the country for cellular mobile handsets, and related sub-assembly component manufacturing
- Under the PMP, an increase was brought about in the BCD rates on imports of sub-assembly, components and accessories of mobile phones, in order to de-incentivise import of the same
- PMP for mobile handset was observed as partial success by the mobile handset industry and is currently being reviewed by the Government.

57. Foreign exchange rate : 1 USD : 73.69 INR as on 22 October 2020

58. Foreign exchange rate : 1 USD : 73.69 INR as on 22 October 2020

Ecosystem development of manufacturing infrastructure

The Government has also taken initiatives to build the support infrastructure around domestic manufacturing with the following schemes:

Electronic Manufacturing Clusters Scheme (EMC 2.0)⁵⁹

- The scheme is aimed at extending financial assistance to uplift infrastructure for EMC projects and industrial parks in India
- Incentive offered in form of financial assistance of up to 50 per cent of the project cost incurred for EMC projects and up to 75 per cent of project cost for Common Facility Centers
- Application for the Scheme can be made by States Governments, State Implementing Agencies, Central Public Sector Units, etc., within a period of three years
- Financial outlay by the Government for the scheme is INR37.62 billion (USD537 million).

Special Economic Zone (SEZ)/ Free Trade Warehousing Zone (FTWZ)⁶⁰

- Development of demarcated enclaves treated as foreign territory for various operations, with the objective of promoting exports from India

- Customs duty and GST payment on procurement of goods and services is not required
- Liberal options available to foreign enterprises looking for business opportunities in India
- Following key recent amendments have been carried out in the SEZ provisions to promote manufacturing in the zones:
 - All SEZ units are deemed as 'multi-sector': Enabling co-existence of SEZ units of one sector with any other sector
 - Trusts allowed to set up SEZs: Likely to promote development of port based SEZs, leading to logistical efficiency
 - Minimum land area relaxed for most SEZs to 50 hectares: Relaxation in minimum land area from 500 hectares to 50 hectares to attract more investors to establish in SEZ
 - Clustering approach for compatible units: Broad banding of IT/ ITeS with financial services, consultancy, design services etc. would enable efficient value chain and optimum utilisation of infrastructure, and lower cost.



59. Website of Ministry of Electronics and Information Technology

60. SEZ Act, 2005, SEZ Amendment Act, 2019 and SEZ Rules 2006

Rationalisation of applicable income tax

Last year, the Government of India reduced the headline corporate tax rate with an objective of making India an attractive destination for global investments, especially in manufacturing sector. With this reduction, India's headline corporate tax rate is

now the lowest amongst the large economies. A snapshot of corporate tax regime for Indian company, non-resident shareholder(s) as per the provisions of Indian Income-tax Act, 1961 ('the Act') and other important tax initiatives forming part of the Act is as under:

Corporate tax rates:

Particulars	Rates*
New Indian manufacturing companies set-up and registered on or after the 1 October 2019 and has commenced manufacturing or production of an article or thing on or before the 31 March 2023 **	15 per cent
Domestic company not availing tax benefits/holidays**	22 per cent
Domestic company with turnover < approx. USD54.52 ⁶¹ million in FY 2018-19	25 per cent
Other domestic companies (not availing 22 per cent tax rate)	30 per cent

The above-mentioned tax rates need to be increased by applicable surcharge and cess.

** Concessional rate of 15 and 22 per cent are subject to fulfilment of stipulated conditions

- No levy of minimum tax on domestic companies resorting to concessional tax rate of 15 or 22 per cent
- With a view to boost employment in India, a tax break of 30 per cent of additional employment cost is available for three years subject to fulfillment of stipulated conditions including that the total emoluments paid to additional employee are INR25,000 (USD341) or less per month. Unlike other tax breaks, above tax break can be availed even if Indian company opts for reduced corporate tax rate of 15 or 22 per cent.

Tax regime for non-resident shareholder(s)

- Long-term capital gains on sale of shares of Indian company by non-resident shareholder(s) are taxable at 10 per cent
- India has strong Double Taxation Avoidance Agreement ('DTAA') network with 91 countries
- A paradigm shift in dividend taxation has been brought in with effect from 1 April 2020. Prior to this, the Indian companies were liable to pay dividend distribution tax ('DDT') at an effective rate of 20.56 per cent. Effectively, out of every INR100 (USD1.36) of distributable profits, Indian companies were required to pay INR20.56 (USD0.28) as tax leaving INR79.44 (USD1.08) for distribution to shareholders. With the change in regime, the burden of paying DDT by Indian companies has been done away with and the classical system wherein the dividend would be taxed in the hands of shareholder(s) has been revived. This effectively permits the foreign

shareholders to avail the benefits of DTAA and potentially apply lower tax on dividend ranging from 5 to 20 per cent (subject to conditions) as per applicable DTAA. In addition, the above change brings some certainty that foreign shareholders would be eligible to claim credit of Indian tax paid on dividend in home jurisdiction subject to tax laws in such jurisdiction

- Royalty/fees for technical services and interest earned by foreign companies from Indian sources are freely repatriable and are typically taxed at 10 per cent or five per cent respectively (subject to satisfaction of stipulated conditions)
- With an aim to reduce compliance burden on non-residents, non-residents earning royalty/fees for technical services, interest and dividend income from Indian sources are exempted from filing of return of income from financial year 2019-2020 onwards if tax is withheld on such income at a rate not less than the rate prescribed under the provisions of Indian income-tax law.



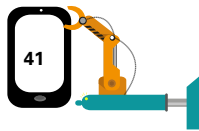
61. Foreign exchange rate: 1 USD: 73.37 INR as on 14 October 2020

Other initiatives

- In order to impart greater efficiency, transparency and accountability in the assessment and appellate process, the Government has introduced Faceless Assessment Scheme and Faceless Appeal Scheme before first level appellate authority. The theme behind such schemes is to reduce human intervention and make tax administration technology driven. Besides this, these schemes are aimed at making the overall assessment and appeal process institutional and robust. Moreover, since taxpayers would not be required to physically visit tax offices for attending the assessment and appeal matters, it should save considerable amount of time which was hitherto spent on attending matters physically in tax offices
- Introduction of Taxpayers' charter in the Act wherein the Government of India has clearly specified tax departments commitments and expectation from the taxpayers
- India has Globally Aligned Transfer Pricing regulations requiring transactions between related parties to meet arm's length criteria including mature Advance Pricing Agreement ('APA') Scheme wherein 271⁶² APAs have been already signed.

62. As per Advance Pricing Agreement Programme of India – Annual Report 2018-19 published by Central Board of Direct Taxes in November 2019.





Influencing consumer buying behaviour: 'Vocal for Local'

The Indian Government is making a concerted attempt to shift the pattern for consumer buying behaviour, with campaigns promoting local manufacturers and brands over international ones. Some of the following instances reflect this shift:

- The Public Procurement of Electronic Goods Initiative was introduced in 2017. As per the initiative, Government-owned companies and Ministries were compulsorily required to procure locally manufactured goods. This has now been extended to procurement of electronic goods by the Government (made effective from September 2020)
- From a regulatory perspective, the Legal Metrology Act, 2009 has enforced the requirement to declare country of origin for imported products on

e-commerce platform for any supplies facilitated by e-commerce companies. In respect of goods made in India, a 'Make in India disclosure' has been made mandatory

- The Government has enforced various other tariff and non-tariff barriers for heavily imported products, to create a level playing field for the domestic players. Additionally, Quality Control Orders (QCO) has been rolled out by multiple ministries, 25,000+ quality standards imposed by Bureau of Indian Standards for various products. This shall enable quality and extend advantage to Indian players, ultimately protecting manufacturing and investment in India.

In addition, the Government is also focusing on promotion of manufacturing in other sectors as well such as pharmaceutical, medical devices, textile, food processing, auto components, battery, network products, etc.

Highlights

The Government has also streamlined the following processes to further improve the ease of doing business in the country:

- E-invoicing under GST introduced that allows real-time tracking of invoices, creation of e-way bills, reduction in frauds, etc.
- Realignment of FTP, as per WTO norms, considering challenges made by various countries against existing export incentive schemes provided under the FTP
- The government is reviewing its existing FTAs with Asian countries to curb cheap imports and promote domestic production. Quick trade deals with the U.S., the U.K. and Europe are also being explored currently by India
- Faceless assessments under the customs laws recently introduced for ease of doing business and to encourage electronic methods of adjudication to assist importers in India
- New framework being planned to drive industrial growth by preparing a strategy paper on industrial relations, labour laws, social security, etc.



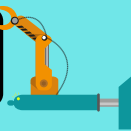
- Various state level initiatives proposed by Indian State Governments that support the electronics industry in India. Under these initiatives, states of Gujarat, Andhra Pradesh, Uttar Pradesh, and Telangana aim to attract large investment for the ESDM sector and emerge as electronic manufacturing hubs in India.

Manufacturing plays a pivotal role in any country's economic growth and development, especially towards the objective of creating an independent, self-reliant nation. Identifying electronics manufacturing as an industry that needed support for growth and development as early as 2011 was a visionary move by the Indian Government.

It helped lay a strong foundation for the sector and enable global readiness for the digital technological revolution. The Indian Government's efforts to expand policy reforms, incentives for domestic manufacturing, etc., should only further propel the country's ambitions to take centre stage globally as a credible manufacturing hub for the ESDM sector.

6 A vibrant public and private banking sector





The Indian banking system consists of 20 public sector banks, 22 private sector banks, 44 foreign banks, 44 regional rural banks, 1,542 urban cooperative banks and 94,384 rural cooperative banks in addition to cooperative credit institutions. According to the Reserve Bank of India (RBI), bank credit and deposits stood at USD1.45 trillion and USD1.98 trillion, respectively, in the fortnight ending July 31, 2020.⁶³

As per the RBI, India's banking sector is sufficiently capitalised and well regulated. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well. The Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. In addition, the RBI's new measures (liquidity injection, lowering cost of credit, regulatory relief) should go a long way in helping restructure the domestic banking industry. Enhanced spending on infrastructure, speedy implementation of projects and continuation of reforms are expected to provide further impetus to growth in the banking sector.

Current monetary conditions and availability of credit

During H1FY21, liquidity management operations by the RBI were conducted as per the revised liquidity management framework introduced on 14 February 2020.⁶⁴ This was guided by the need to expand liquidity in the system to ensure that financial markets and institutions function normally in the face of the COVID-19 pandemic. In view of this, the Reserve Bank reduced the policy repo rate by 40 bps on May 22, 2020 on top of a 75 bps reduction on March 27, 2020. In order to make it relatively unattractive for banks to passively park funds with the Reserve Bank and to encourage their deployment for on-lending to productive sectors of the economy, the policy interest rate corridor was widened to 90 bps through a reduction of 25 bps in the reverse repo rate on April 17, 2020. Liquidity augmenting measures initiated since February 2020 were further reinforced targeting specific sectors and entities to alleviate liquidity and funding stress. Overall, total liquidity support announced by the Reserve Bank since February 6, 2020 (up to September 30, 2020) amounted to INR11.1 trillion (USD159 billion) or 5.5 per cent of GDP.⁶⁴

As a result, domestic financial markets returned to normalcy with a recovery in trading volumes, narrowing of spreads and rebounds in financial asset prices after a near collapse in market activity, post the imposition of the nation-wide lockdown to combat COVID-19.

63. Indian Banking Industry Analysis, September 2020 - IBEF

64. RBI website accessed on November 24, 2020

A slew of monetary, liquidity, credit easing and regulatory measures by the RBI combined with the Government's stimulus package enthused market sentiment. In the credit market, transmission has improved relative to the historical experience, facilitated by policy rate cuts, persisting abundance of liquidity and the introduction of an external benchmark system for the pricing of loans in select sectors. Bank credit growth has, however, remained tepid.

The transmission of policy repo rate changes to deposit and lending rates of banks has improved since the April 2020 Monetary Policy Report. The weighted average lending rate (WALR) on fresh rupee loans declined by 91 bps since March 2020 in response to the reduction of 115 bps in the policy repo rate and comfortable liquidity conditions. Of the 105 bps reduction in the weighted average domestic term deposit rate (WADTDR) on outstanding rupee deposits during the ongoing easing cycle (i.e., since February 2019), a little over half of the decline, i.e. 59 bps occurred since March 2020.⁶⁵

In the wake of sizable conventional and unconventional measures by the Reserve Bank, turnover in various market segments is increasing and spreads have narrowed appreciably. The return of capital inflows is an indicator of growing investor confidence in the Indian economy. The pace of monetary transmission has also quickened, but credit growth remains feeble. Going forward, liquidity conditions would continue to be calibrated, consistent with the stance of monetary policy while ensuring normalcy in the functioning of financial markets and institutions and conducive financial conditions. Efficient monetary policy transmission, particularly to the credit market, would continue to assume priority in the hierarchy of policy objectives.



Credible legal systems to enforce contracts

India has credible substantive and procedural laws along with a well-established system of judicial enforcement of rights.

The Indian Judiciary administers a common law system of legal jurisdiction, in which customs, precedents and legislation, all 'codify' the law of the land. An elaborate mechanism is provided for grievance redressal including enforcement of contracts under Indian statutes. Amongst other Acts, the Indian Contract Act, 1872 and the Specific Relief Act, 1963 are the two primary legislations governing the enforcement of contracts between parties. Indian contract law lays down specific criteria to be satisfied for a contract to be legally binding and enforceable. The country's courts recognise and respect international contracts stipulating a foreign jurisdiction subject to such choice of law meeting the criteria's set forth by applicable legislation in India.

Online contracts which meet the essentials of a valid contract set out under Indian contract law read with other applicable laws are also recognised by and enforceable before Indian courts. Such contracts should be a lawful agreement between two or more parties who are competent to contract with a valid offer and an acceptance of such offer communicated 'electronically' between parties. In order to be admissible in evidence before Indian courts, stamp duty is required to be paid on all agreements irrespective of the form of execution. Besides coded laws, India also follows the common law principles. The judgments of the Supreme Court of India, as precedents, have the same force as that of the law of the land. Arbitration and Conciliation is an alternative dispute resolution mechanism in the country. A specific statute containing the provisions in relation to arbitration and conciliation is in place. The awards issued by an arbitrator are enforceable like a court order and a decree can be awarded by a court to enforce the same.

65. RBI Bi-monthly Monetary policy statement 2020-21

Digital banking at the core of HSBC propositions

HSBC has been at the forefront of innovation in this area with an aim to redefine customer experiences. The bank has been observing the evolution of customer requirements over the years which has helped drive the change towards digitisation. In this road to a 'Digital India', an initiative driven by the Government of India, HSBC has come up with a variety of digital solutions to help migrate customers from paper to electronic:

- **Omni Collect:** A one-stop solution that allows corporates to provide multiple payment options to their customers across several modes including bank transfers, card payments and e-wallet transactions. A single interface with HSBC supports both in-store and online purchases across many service providers
- **DART Payment Gateway:** Digital Accounts Receivables Tool (DART) developed by HSBC provides an alternative and new accounts receivable proposition to clients seeking a digital solution to transmit, present and receive open invoice related information to / from their buyers. HSBC clients and payors can now access the DART portal to view invoices, track when the payor has planned their payments and view all actions taken on an invoice till they are fully settled
- **UPI AutoPay:** HSBC India has become one of the pilot banks to implement a recurring mandate with the payment regulator NPCI
- **NACH e-mandate:** HSBC has started on-boarding customers on e-mandate for NACH launched by NPCI to further drive the paper-to-electronic initiative using the API proposition
- **Application programming interface (APIs):** HSBC has a suite of API propositions which has enabled customers to reduce the turn-around time required for transactions initiated by them allowing corporates to leapfrog from manual or paper-based transactions to remitting funds electronically
- **Account Receivable Reconciliation (ARR) Solution:** Driven by machine learning capabilities to auto match payment advices against the account receivable information provided by clients
- **Cash Flow Forecasting:** The COVID-19 pandemic has made cash flow visibility more important than ever. HSBC's Cash Flow Forecasting tool, with its detailed modelling and scenario testing, makes gaining visibility of cash flow quicker and easier for customers
- **Liquidity Management Portal:** HSBC's online liquidity visibility platform called Liquidity Management Portal, simplifies real-time access to cash positions across multiple banks, spanning geographies, time zones and currencies. This enables fact-based decision-making regarding deployment of cash across several modes of investment or via cash concentration mechanisms
- **HSBC Corporate Card:** New-age propositions like Virtual Cards where the client has freedom to generate a virtual card for a specific use-case. This solution requires no manual intervention resulting in a real-time virtual card generation for the customer
- **Digitrade 2.0:** An open account functionality on HSBC internet banking platform (HSBCnet), wherein customers can now submit transaction data digitally instead of providing the underlying documents. This enabled paperless compliance for open account import payments and export regularisation transactions, providing customers with a dashboard of their outstanding trade position with regulators
- **Trade Dashboard:** Single global view of trade transactions and outstanding portfolio, convenient and user-friendly interface, highlighting actions for customer's attention, such as an import DC due to expire or an import bill due for payment
- **Trade Tracker Application:** Mobile app for customers to know the status of their transactions submission, 24/7 access to real-time transaction and document status, real-time courier tracking of export documentation.



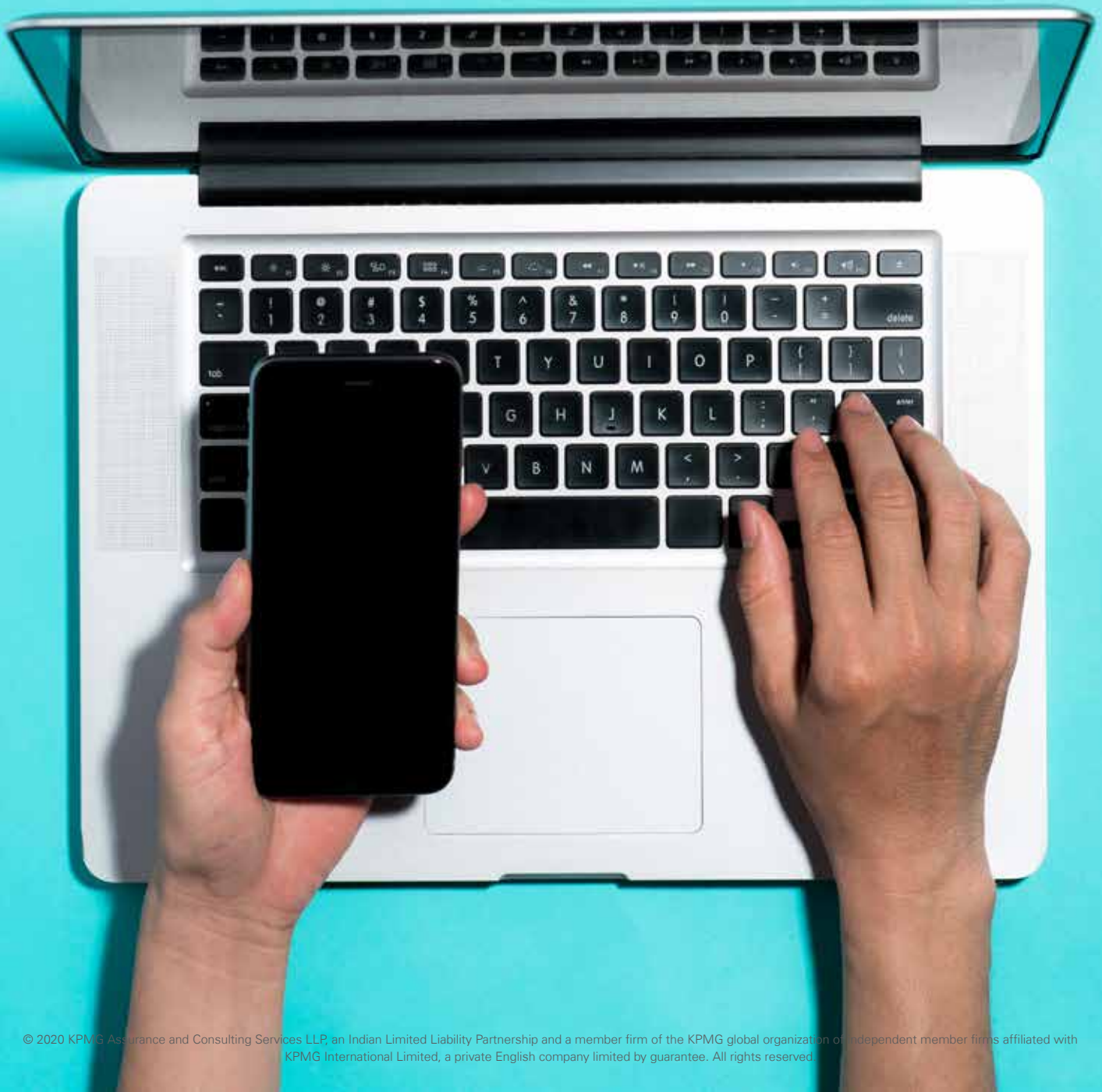
How can HSBC help?

The outbreak of the COVID-19 pandemic has prompted several countries like the U.S., Germany, Japan, South Korea, etc., to expedite the diversification and restructuring of their global value chains. An increasing number of companies are now looking at strategically placing their manufacturing units outside China partially or even considering new investments in other countries based on resources.

According to the latest Capital Confidence Barometer report, 67 percent of Asia Pacific executives are undertaking measures to transform their supply chains, compared to 52 percent of respondents across the rest of the globe. With the aim to

support foreign investors, there have been a host of incentives and measures implemented by the Government of India, with which we are confident that India as an investment destination is being discussed across boardrooms.

HSBC has been working with NITI Aayog and respective line ministries in enabling market access to global investors. We are here to partner with you in making these decisions smoother and well informed. There are many examples of how the HSBC team has supported clients to ensure a softer landing into the ecosystem and our efforts are aimed at sharing in your growth/ de-risk journey.





We are riding on a 1100 per cent growth in mobile phone and component manufacturing since 2015 but not resting on laurels. We along with GoI have envisioned India as the world's leading mobile phone manufacturing a vision articulated by the Hon'ble PM himself. We will and are spreading this mission to other verticals of electronics also. HSBC has been a valuable partner in this endeavour with their relentless support and timely investor outreach activities, which have been supplementing the efforts of ICEA and the Govt of India for the growth of the sector.

Mr. Pankaj Mohindroo,

Chairman: India Cellular and Electronics Association



This is to acknowledge the support given by HSBC team in guiding us and providing their valuable suggestions on managing our Parental ECB. The timely support provided by the team especially during COVID-19 and keeping in mind our preferred timeline was commendable. We look forward to working more closely with HSBC in days to come.

Tinghao Lin,

Finance Controller, Avary Holdings



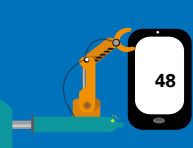
The electronic industry has witnessed radical policy changes with the introduction of PLI and SPECS which shall aid the attainment of a USD400 billion turnover by 2025 and USD100 billion of exports. We are working on PLIs for other segments under the sector and I wish to thank HSBC for their support to the growth of the industry aiding a softer landing for global investors to India and support for the tech startup ecosystem.

Virat Bhatia,

Chairman, FICCI National Committee on Mobile Handset Manufacturing Ecosystem

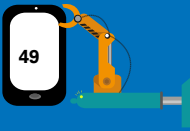


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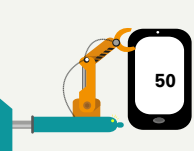


Glossary

APAs	Advance Pricing Agreement
APIs	Application programming interface
APTP	Assembling programming testing and packaging
ARR	Account Receivable Reconciliation
ATMP	Assembly, Test, Marking and Packaging
BCD	Basic customs duty
BoM	Bill of Material
CAGR	Compound annual growth rate
CBUs	Completely built units
CEO	Chief executive officer
CFCs	Common Facility Centers
CKD	Completely Knocked Down
COVID	Corona Virus Disease
DART	Digital Accounts Receivables Tool
DDT	dividend distribution tax
DFCs	Dedicated Freight Corridors
DGCI&S	Directorate General of Commercial Intelligence and Statistics
DTAA	Double Taxation Avoidance Agreement
ECB	External Commercial Borrowing
EMC	Electronics Manufacturing Clusters
EMS	Electronics manufacturing service
ESDM	Electronics Systems and Design Manufacturing
FDI	Foreign Direct Investment
FICCI	Federation of Indian Chambers of Commerce & Industry
FTA	Free trade agreement
FTP	Foreign Trade Policy
FTWZ	Free Trade Warehousing Zone
FY	Fiscal Year
GCI	Global Competitiveness Index
GDP	Gross domestic product
GoI	Government of India
GST	Goods and Services Tax
HDI	High Density Interconnector
HSBC	Hongkong and Shanghai Banking Corporation
IC	Integrated circuit
ICEA	Indian Cellular and Electronics Association
IHS Markit	Information Handling Services Markit
LED	Light-emitting diode



MEIS	Merchandise Exports from India Scheme
MEITY	Ministry of Electronics and Information Technology
MOOWR	Manufacture and Other Operations in Warehouse Regulations
M-SIPS	Modified Special Incentive Package Scheme
NACH	National Automated Clearing House
NDCP	National Digital Communications Policy
NITI	National Institution for Transforming India
NMP	National Manufacturing Policy
NPCI	National Payments Corporation of India
NPE	National Policy on Electronics
OEM	Original equipment manufacturer
PAT	Profit after tax
PCB	Printed circuit board
PCBA	Printed circuit board Assembly
PLI	Production Linked Incentive
PM	Prime Minister
PMI	Purchasing Managers Index
PMP	Phased Manufacturing Program
PPO	Public Procurement Order
QCO	Quality Control Orders
R&D	Research and Development
RBI	Reserve Bank of India
ROCE	Return on the capital employed
RoDTEP	Remission of Duties and Taxes on Exported Products
S&D	Sales & Distribution
SEIS	Service Export from India Scheme
SEZ	Special Economic Zone
SKD	Semi Knocked Down
SPECS	Scheme for Promotion of Manufacturing of Electronics Components and Semiconductors
STEM	Science, technology, engineering, and mathematics
U.S.	United States
UPI	Unified Payments Interface
USB	Universal Serial Bus
USD	United States dollar
WADTDR	Weighted average domestic term deposit rate
WALR	Weighted average lending rate
WTO	World Trade Organisation



About HSBC India

The Hongkong and Shanghai Banking Corporation Limited in India offers a full range of banking and financial services through 26 branches across 14 cities. HSBC is one of India's leading financial services groups, with over 40,000 employees in its banking, investment banking and capital markets, asset management, software development and global resourcing operations in the country. It is a leading custodian in India. The Bank is at the forefront in arranging deals for Indian companies investing overseas and foreign investments into the country.

HSBC Holdings plc

HSBC Holdings plc, the parent company of HSBC, is headquartered in London. HSBC serves customers worldwide from offices in 64 countries and territories in its geographical regions: Europe, Asia, North America, Latin America, and Middle East and North Africa. With assets of USD2,956 billion at 30 September 2020, HSBC is one of the world's largest banking and financial services organisations.

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KPMG entities in India offer services to national and international clients in India across sectors. We strive to provide rapid, performance-based, industry-focussed and technology-enabled services, which reflect a shared knowledge of global and local industries and our experience of the Indian business environment.



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