Oct, 2019

e-Newsletter - Issue 10/2019 Fraunhofer Office India Chancellor Dr. Angela Merkel visits India (31st Oct—1st Nov 2019) Strategic Partnership for Sustainable Growth and a Reliable International Order"

1. At the invitation of Prime Minister Shri Narendra Modi, German Federal

Chancellor Dr. Angela Merkel visited India from 31 October - 1 November 2019 for the fifth round of Inter-Governmental Consultations (IGC). Chancellor Merkel was accompanied by Ministers of Foreign Affairs, Science and Education, Food and Agriculture, and an Official Delegation. A business delegation comprising leaders of German companies also accompanied Chancellor Merkel. During the visit, Chancellor Merkel held meetings with President Ram Nath Kovind and Prime Minister Modi.

2. Chancellor Merkel and Prime Minister Modi reiterated that the Indotional order by strengthening and updating multilateral institutions.

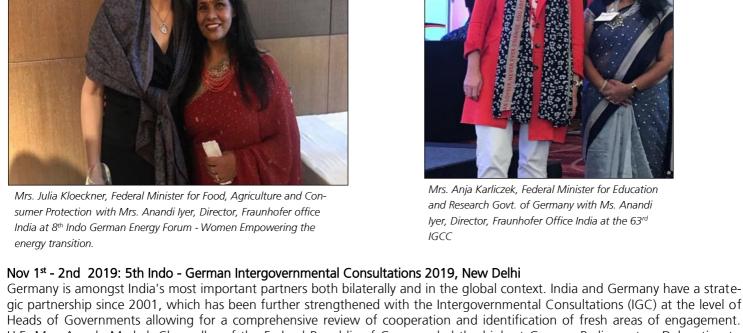
German Strategic Partnership is based on the common values and principles of democracy, free and fair trade, and rules-based international order, as well as on mutual trust and respect. Key issues in the discussions included jointly driving the digital transformation through innovation and frontier technologies, especially artificial intelligence, making economic growth sustainable by cooperating on climate change, creating space for people to people contacts through legal mobility for skilled labour, and contributing to a reliable interna-For further information, click here



Modi along with Subrahmanyam Jaishankar, Minister of External Affairs at the

Fraunhofer was a prominent part of the events and activities around the visit. Mrs. Anandi Iyer was present in New Delhi on the invitation of the German Embassy and the Indian Government, and participated in the official events around the visit. This included the Indo German Energy Forum where she was one of the dignitaries who inaugurated the business event ahead of the Forum. She also met with the Chancellor Delegation, and had detailed discussions with Mrs. Anja Karliczek, Federal Minister for Education and Research, Mrs Julia Kloeckner, Federal Minister for Food, Agriculture and Consumer Protection as well as Mr. Christian Hirte State Secretary for Economics and Energy. Fraunhofer signed a MoU with the Council for Education and Scientific Research on the subject of partnership in Frontier Technologies, with focus areas being Water, Building Technologies, Battery Technologies and Advanced Production Technologies. Fraunhofer was also the Innovation Partner to the 63rd AGM of the Indo German Chamber of Commerce, where the Chancellor Dr. Angela Merkel was the Chief Guest.





H.E. Mrs. Angela Merkel, Chancellor of the Federal Republic of Germany led the highest German Parliamentary Delegation to New Delhi on Nov 1st and 2nd 2019 for 5th IGC with Hon'ble Prime Minister of India Shri. Narendra Modi and his cabinet. 17 MoUs were signed during the 5<sup>th</sup> IGC. MoU between Fraunhofer and Council of Scientific and Industrial Research (CSIR), Govt. of India to promote, establish and expand Scientific and Technological Research Cooperation between India and Germany was amongst the 17 signed MoUs.

For details about 5<sup>th</sup> IGC and the MoUs, please <u>click here</u>

signing the agreements, which also included the Al partnership.



India and Germany has Signed Agreement On Al For Agritech, Green Mobility

mobility. The German ambassador, Walter J. Lindner added that Merkel and Prime Minister Modi are expected to discuss trade, investment, regional security and environmental related issues. Click >> <u>here</u> for more info India will honour energy contractual commitments: Nirmala Sitharaman, Un-

India and Germany has signed the agreement to collaborate on the use of artificial intelligence (AI) in farming. The development came into light after it was reported that Indian Prime Minister Narendra Modi and German Chancellor Angela Merkel will be

According to a Reuters report, both countries has signed the agreements, which will not only include Al, but also green urban

India Energy Forum of CERAWeek Nirmala Sitharaman said that

ion Minister for Finance & Corporate Affairs

she wanted to highlight the justifiable concerns about honouring contractual commitments.....India as nation is concerned.

Finance Minister Nirmala Sitharaman on Monday said that India will honour contractual commitments under various energy agreements especially in renewables and investors need not worry about this issue. "I also want to broadly highlight the justifiable concerns about honouring contractual commitments....We as a nation (are) concerned. We will make sure that commitments are honoured. That should not worry those investors or those who already invested in building capacities in India for energy and energy security," Nirmala Sitharaman said Speaking at the

Click >> <u>here</u> for more info Recent Events / Activities Nov 2<sup>nd</sup> 2019: Visit of Dr. Angela Merkel, Chancellor of the Federal Republic of Germany to the 63rd Annual General Meeting of the Indo-German Chamber of Commerce The Chancellor of the Federal Republic of Germany- Dr. Angela Merkel inaugurated and attended 63rd Annual General Meeting of the Indo-German Chamber of Commerce (IGCC). On this occasion she outlined the pollution condition in India's national capital New Delhi and appealed to upgrade the conditions of small farmers. Seeing the pollution level in Delhi during her visit, she suggested to replace diesel buses with electric buses under Indo-German Partnership for green urban mobility for which Germany has earmarked US\$1 Billion. She has also earmarked Euros 200 Million to reform bus sector in Tamil Nadu.



Around 12 Indo-German companies and institutions displayed diverse products and services in the exhibition. Fraunhofer office India also coordinated a stand, featuring and showcasing the competencies in Artificial Intelligence, Industry 4.0, Smart city and Renewable energy through poster presentation. The stand was visited by industrial delegates, policy makers and individuals to

see Fraunhofer competencies and how Fraunhofer can assist them as a technology partner.



5<sup>th</sup> from L: Dr. Angela Merkel, Chancellor-Federal Republic of Germany with

L to R: Ms. Riby Mathew, CSML, Dr. Debjani Ghosh, NIUA, Dr. Markus



Meeting at CSML

Schwegler, Fraunhofer IAO, Ms. Ernesta Maciulyte, University of Stuttgart, Article How 3D printing is poised to transform Indian manufacturing? India's manufacturing sector is growing to become the fifth largest in the world by 2020. Aided by the Indian government's initiative of 'Make in India', the nation's vision is to make the

healthcare industry. The potential of 3D printing has hardly any bounds, it is only limited by imagination.

2013

2019F

Global 3D Printers Market Revenue Share, By Region



**North America** 

**Latin America** 

2011

2012

2013

2014E

2019F

13,237

15,651

18,868

CAGR (2014-19F) ~ 19.6%

2019F

2013

.52%

2019F

2.88%

Canada

country a global manufacturing hub. A resource-rich nation



Europe

Estonia Finland Germany Greece Ireland

Norway Poland Russia Slovenia

4,84,210

2019F

1.68.156

2019F

54.9%

2019F

18,868

2014E

Cyprus Czech Republic

Asia-Pacific

Australia



CAGR (2014-19F) ~ 19.6% 46,113 2019F 2,400

480

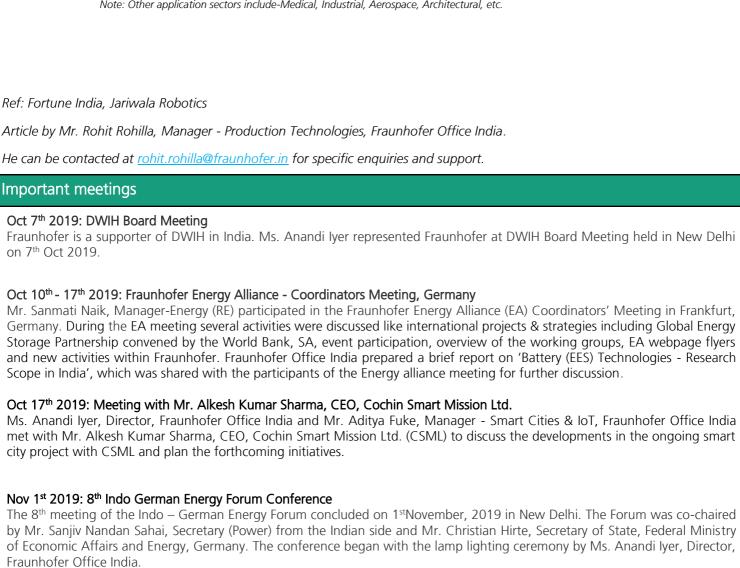
838

ASP (2013) = \$24,643

2012

2013

2014E



Visit of the delegation of Cochin Smart Mission Ltd. (CSML) to Barcelona for Morgenstadt Conference and visit to Fraunhofer's

Bengaluru Tech Summit is a gathering foreground for all those who thrive on businesses that leverage technology. Over the last few years, the summit has become a global catalyst, introducing next generation innovators to the market place & shrinking borders to bring world technology to Indian soil. A conducive stage, where industry experts share their insights on technological advancements in varied sectors and where businesses create fruitful cross-linkages to further their growth in the realm of IT and BT.

As a part of Global Innovation Alliances (GIA), the German Consulate General in Bangalore has confirmed its participation in Bengaluru Tech Summit 2019 and is conducting a session on Artificial Intelligence on Nov 19th 2019. Fraunhofer has been requested to participate as a speaker in a high-level panel discussion on Artificial Intelligence – Driver of Sustainability. A brief background of the panel discussion is - AI has the potential to lead to profound changes in the way humans, organizations and technology interact. This session will be curated to highlight the latest trends and challenges in the field of Artificial Intelligence regarding

To participate in this event, please contact Mr. Sanmati Naik, Manager - Energy (RE), Fraunhofer Office India at sanma-

Sony Corporation, Music Industry Partners and Leading Artists Gather to Reveal a New Music Ecosystem with 360 Reality Audio

Smart City Labs. This visit will be undertaken as a part of the project activity under Kochi Smart City Innovation Lab.

## Ms. Anandi Iyer, Director, Fraunhofer Office India is one of the panellists in the panel discussion on 'Artificial Intelligence – Driver of Sustainability' Click >> <u>here</u> for more info on Bengaluru Tech Summit 2019. Nov 27<sup>th</sup> - 29<sup>th</sup> 2019: Intersolar India 2019, Bangalore

Fraunhofer mentions in the news

Click >> here for more info on Intersolar India 2019.

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**Automotive** 

Healthcare, Agritech, & mobility/Aviation.

**Upcoming Events** 

Favour products containing plastics recycled from waste: UN German startup to measure Earth's temperature round the clock using CubeSats Paper Could Be the Future of MEMS **India's Robot Wonder** 

Mahindra Ecole Centrale sets up specialized Automotive Systems and IC Engines Laboratory

MG Motor India starting up automotive ecosystem with Developer Program & Grant

Automotive battery-maker Exide forays into manufacture of e-rickshaws

India to Become One of World's Largest EV Markets, Reduce Automotive Industry's Global Footprint: Report

Nov 18th - 20th 2019: Morgenstadt City Insights (M:CI) Conference, Barcelona

Nov 18<sup>th</sup> - 20<sup>th</sup> 2019: Bengaluru Tech Summit 2019, Bengaluru (Bangalore)

Rethinking People For The Manufacturing Sector Manufacturing growth falls to a two-year low in October, shows data Reinventing the wheel: The constant transformation of India's auto sector <u>Indian Manufacturing Must Leapfrog From Industry 2.0 To Industry 4.0</u> Govt plans to set up hubs for manufacturing medical devices, bulk drugs

6 ways to reignite India's auto industry

<u>Vikram Solar plans to double PV module manufacturing capacity</u> <u>India to build 30 gigawatts of renewable plants along western border</u> Policy Highlights for Solar and Other Renewable Sources from October 2019 **Smart Cities** 

<u>India joins global alliance on responsible use of smart city technologies</u> 11 innovations that are driving smart cities in India Air Pollution | Revisit economic policies and plan for a healthier way to live Dell plans to create an innovation ecosystem with local cos and startups Research & Development



US company Rubrik opens R&D centre in Bengaluru

India and Germany likely to sign agreement on artificial intelligence

Economy

India needs USD 30 billion yearly investment in renewables India's economy to grow 6.6% in 2020-24 The most desirable development model for a country like India Services sector has potential to generate jobs, boost economy



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Renewable Energy Centre launches project to integrate renewable power with national grid Merkel lauds India for its initiatives in the field of renewable energy Automotive Li-ion Battery Market Projected to \$74.3 Bn by 2024, Report

Manufacturing

5 reasons why India needs cybersecurity education

Focus on research to make India global leader in defence technologies <u>India's first privately-owned R&D Corporate hub coming up in Delhi NCR</u> Cultivating A Learning Led Culture In Contract Research Organisations

What's ailing the economy and how to fix it

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