

Sustainability Engineering Trends Q4 2021

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Sustainability is a megatrend and all enterprises are striving to increase their sustainability efforts. Engineering service providers can help to improve the sustainability of enterprises.

This is our quarterly sustainability engineering trends tracker based on our sustainability engineering framework defined in our earlier <u>PoV</u>.

Sustainability services can be classified into five categories: energy, material, pollution, water, and food or forest. These categories are further divided based on changes in usage mix, reduction in wastage, or increase in efficiency. The five categories are applicable across three segments: products, process, and place.

There are many examples of sustainability services and initiatives we found in Q4, 2021 across these five categories and three segments, as summarized in Exhibit 1. Details are discussed in sections to follow.

Exhibit 1: Summary Sustainability Engineering Engagements Q4, 2021 (Enterprises & Service Providers)

		Product	Process	Place
47 Energy	Savings	Boeing, Collins, P&W, Samsung, IBM	Ansys, Huawei, Google, SEAT, Volkswagen	Altair, Wartsila, bp, Dassault, NTT Infosys, T Systems, LTTS, Atos
	Mix	JCB, Neste, IOC, BMW, Doosan, Lhyfe, GE, Alstom, bp, Faurecia, ADNOC, Shell, Caterpillar, Rolls Royce AKKA, FEV, Segula	Ecocem, SKF, Nissan, Schaeffler, Gulfstream AKKA	ABB, Danfoss, Airbus AKKA
<u> </u>	Savings	Fairphone Holcim,	Pirelli	Renault, Nissan
Material	Mix	Apple, TotalEnergies, Exxxon, Coca-Cola	LG Chem, Evonik AFRY	Yuma Labs
Pollution	Reduction	Saab, MHI, Exxon, Volkswagen AVL	MHI, Bosch, HERE	ABB, AVEVA Ricardo
\bigcirc	Savings		UMPI Wipro	
Water	Mix	Abengoa	LG Energy	
900	Wastage		Bayer, Microsoft	Mydin, Infineon UST
Food/Forest	Mix	TurtleTree		Signify
Overall		Tesla, JLR, Chevron, ADVA, JAGGAER Thoughtworks, Capgemini, Accenture, TietoEVRY		

Source: EllRTrend, Media Reports



Energy

Energy, especially that produced from fossil fuels, is a major concern for sustainability. There are two ways in which energy can be leveraged for sustainability: by changing the energy mix and by generating savings in energy usage.

- **Energy Mix:** Many enterprises are reducing the use of fossil fuels by changing the mix of their energy usage. Some examples in Q4, 2021.
 - JCB announces £100m investment in super-efficient hydrogen engines in UK.
 - AKKA to drive decarbonization of European ports as member of PIONEERS International Consortium
 - Boliden collaborates with Epiroc and ABB on the journey towards a fossil free mine. The
 three companies will jointly develop an electric trolley truck system for underground mining
 at the Boliden Kristineberg mine in Sweden
 - Ecocem has opened a low-carbon R&D center in Paris, France, to accelerate the development of low-carbon solutions that will support cement and construction industries to decarbonise more quickly.
 - Neste has announced that, in order to accelerate its innovation capacity and its focus on renewable fuels, it is establishing an R&D center in Singapore.
 - AKKA reveals Green&Fly, its fully electric, hydrogen-powered concept aircraft, featuring a
 disruptive design based around a rhombohedral wing shape. Designed to carry up to 30
 passengers for a range of 500km, it is a zero-emission concept for flights at a regional scale.
 - Indian Oil Corporation will set up a new R&D center entailing investments to the tune of
 ₹3,200 crore at Faridabad. The center would conduct research into various areas, including alternative and renewable energy, nanotechnology among others.
 - Doosan to build R&D center in Yongin, South Korea to ramp up hydrogen biz.
 - Lhyfe has inaugurated its first production site in Bouin, France. It is one of the first in the world to produce renewable green hydrogen using wind power on an industrial scale.
 - AKKA's Project Flexmove supported by the Occitanie Region in France. Flexmove is a
 multimodal mobility service based on an electric vehicle that can be driven like a normal car
 on the road and can also travel autonomously on railways thanks to special road-to-rail
 technology developed by AKKA.
 - FEV France has invested in a test bench dedicated to fuel cell system tests of up to 200 kW. At the same time, the company has adapted two test benches for the development of hydrogen combustion engines. FEV France is one of the eight winners of the automotive sector selected as part of the "France Relance" plan. The objective is to support investments of leading companies through dedicated funds to drive the transformation of the automotive and aerospace sectors.

- Mitsubishi Electric's Net Zero Energy Test Facility Cuts Annual Operating Energy to Below 0%
- SKF is supporting the development of fossil-free bearing steel by supporting research for hydrogen use in industrial processes and energy systems.
- Emirates has signed a MoU with aircraft engine supplier GE Aviation to conduct a test flight using 100 per cent sustainable aviation fuel by the end of 2022.
- AVEVA and Helios IoT Systems Partner to Empower the Solar Energy Industry with Deep Insights and Advanced Analytics
- Autoliv and SSAB collaborate to produce the world's first fossil-free steel components in automotive safety products
- Danfoss partners with Zhenjiang Shipyard to accelerate the electrification of China's marine industry
- SEGULA Technologies supports the startup WIND my ROOF in the development and assembly of its first 8 innovative compact wind turbines dedicated to mixed energy production combining wind and solar called Wind box.
- Alstom and Liebherr sign a collaboration agreement, in order to optimise hydrogen fuel cells for railways
- bp acquires c. 29% stake in major UK provider of biomethane for heavy goods vehicles,
 Gasrec.
- Airbus, Air Liquide and VINCI Airports announce a partnership to promote the use of hydrogen and accelerate the decarbonization of the aviation sector
- Air Liquide and Faurecia announce a Development Agreement to boost Hydrogen for Heavy-Duty vehicles
- Air Liquide and Eni signed a Letter of Intent with the objective to enable the sustainable deployment of an extended network of hydrogen refueling stations in Italy.
- Batteries from Nissan LEAF electric vehicles (EVs) are being repurposed for use at railway crossings in eastern Japan as an alternative to lead-acid batteries in emergency power supply units. At a railway crossing, the battery is susceptible to voltage surges from its connections to devices such as barriers, alarms and control equipment. To withstand these, modifications have been made to the battery control infrastructure.
- Indian Railways to Develop 71 MW of Solar Projects on its Vacant Land
- Primetals Technologies and thyssenkrupp join forces to launch an innovative blast furnace technology enabling a key step towards carbon neutrality
- Schaeffler is the consortium lead for the sub-project "Stack Scale up Industrializing PEM
 Electrolysis" of the H2Giga hydrogen flagship project. The sub-project aims to develop new,
 scalable technologies and production processes for PEM-low-temperature electrolysis stacks

- BMW plans to source steel produced with up to 95% less CO2 emissions from the Swedish startup H2 Green Steel, which uses hydrogen and only green power from renewable energies for steel production. BMW Group and H2 Green Steel have also agreed to create a closed-loop material cycle. H2 Green Steel will take back sheet metal remnants, such as those produced at press plants when doors are punched out, and will process them in such a way that they can be shipped back to the plants as new steel rolls, also known as steel coils.
- Hitachi Rail to receive 100% renewable electricity from ScottishPower
- Schaeffler to buy green steel from Swedish start-up company H2greensteel
- Gulfstream will construct a new aircraft MRO facility in Arizona with more than \$70 million investment. is designing the facility with sustainable operations in mind. It will feature a fuel farm with a dedicated sustainable aviation fuel (SAF) supply; low-flow plumbing fixtures; LED lighting; building management systems; and an energy-efficient HVAC system. It is also eploring Green Power.
- Rolls-Royce and SDCL join forces to accelerate the take-up of sustainable power with launch of 'Energy-as-a-Service'
- Ansys Fuels Carbon-Free Transportation with Synhelion. Swiss clean energy startup uses
 Ansys simulation solutions to create solar fuels and reduce CO2 emissions
- ADNOC has unveiled a £2.7billion development for electrification of giant offshore oil and gas fields off Abu Dhabi. A "first-of-its kind" subsea transmission network will be built, decarbonising production by replacing existing offshore gas turbine generators with more sustainable power sources. A dedicated company will fund the development, jointly owned by TAQA and ADNOC (30% stake each), and a consortium comprised of Korea Electric Power Corporation (KEPCO), Japan's Kyushu Electric Power Co. and Électricité de France (EDF).
- Shell acquires solar and energy storage developer Savion, further expanding its global renewable power business
- Caterpillar, BNSF and Chevron Agree to Pursue Hydrogen Locomotive Demonstration
- Lockheed Martin Invests \$9 Million in TC Energy Solar Plus Storage Generation Facility To
 Advance Alberta Sustainability And Decarbonization Efforts. Lockheed Martin's investment,
 under Canada's Industrial and Technological Benefits (ITB) Policy, is one of many made
 across Canada associated with Canada's purchase and in-service support of 17 CC-130J
 Super Hercules aircraft, delivered to the Royal Canadian Air Force from 2010 through 2012.
 The investment exemplifies how defense procurement projects serve as a catalyst for
 innovation, critical research and development.
- easyJet and Rolls-Royce to collaborate on future aviation Sustainability research
- bp and Maersk Tankers carry out successful marine biofuel trials
- GM Opens Broad Application of EV Component Sets, Advancing the 'Everybody In'
 Electrification Approach. Electrification components applied to EV conversion projects,

- commercial equipment, marine applications and more. Expanding GM's technology platforms beyond its core portfolio will drive growth beyond vehicle sales and enable new business models
- Nissan will sell electricity generated from virtually 100% renewable energy to its employees in Japan as parts of its carbon-neutrality efforts. The program will first be made available to employees living in the Kanto region at the start of fiscal year 2022.
- Energy Savings: The efficiency of energy usage can be increased by reducing energy wastage and losses across products, processes, and places. Some examples in Q4, 2021.
 - Ansys Enables More Sustainable Product Development with Fujitsu. LS-DYNA saves computational energy consumption by providing high-fidelity results faster.
 - Altair's Toggled Launches Toggled iQ Smart Building Control Solutions for Sustainable
 Operations
 - Huawei Launches GreenSite and PowerStar2.0 to Help Build Green, Low-Carbon 5G Networks. The GreenSite solution integrates innovative architecture, site construction, and algorithms with leading-edge software and hardware, improving energy efficiency by 20 times. The PowerStar2.0 solution introduces new intelligent energy-saving features to base stations and networks to reduce energy consumption by over 25% through multidimensional coordination under typical configurations.
 - bp and Infosys to Develop 'Energy as a Service' Solution for Campuses and Cities. Infosys and bp intend to co-develop a digital platform that can collect data from multiple energy assets and use artificial intelligence to optimize the energy supply and demand for power, heat, cooling and EV charging. The companies will pilot the digital platform at the Infosys Pune Development Center in an environment that replicates a small city
 - In Israel, Google tests AI tech to better time traffic lights. Early results show 10-20%
 reduction in fuel use and delay time at intersections.
 - T-Systems and Frequentis partnership for the digital Airport. More efficiency and sustainability.
 - LTTS has entered into an agreement with Microsoft to offer LTTS' Energy & Sustainability
 Manager Solution on Microsoft Azure to digitally transform and create sustainable factories of the future.
 - Boeing and Etihad Airways Expand Sustainability Alliance to Drive Innovation in the Aviation Industry. The new agreement will focus on enhancing the efficiency of navigation and flight operations, airframe technologies and sustainable practices to reduce Etihad's fuel use and emissions.
 - Collins Aerospace advances connected aviation with FlightAware

- Atos and Siemens to support Morocco in the smart management of its power grid. The
 project is part of the country's Energy Efficiency program and encompasses the
 implementation of Siemens' EnergyIP meter data management platform.
- SEAT S.A. and Volkswagen Autoeuropa connect Martorell and Palmela factories by train to boost sustainability
- Pratt & Whitney Introduces GTF Advantage for Airbus A320neo Aircraft Family. It is the
 world's most fuel-efficient and sustainable single-aisle aircraft engine decreases fuel
 consumption and CO2 emissions by 17 percent compared to prior-generation engines
- Agility Signs MOU with Huawei to Transform its Logistics & Industrial Parks to Smart Campuses in Kuwait
- Spanish carmaker SEAT tests drone deliveries of parts to factory
- Wärtsilä to support Bahamas in achieving a sustainable and decarbonised future with optimised energy system
- IBM and Samsung Unveil Semiconductor Breakthrough That Defies Conventional Design utilizing a new vertical transistor architecture that demonstrates a path to scaling beyond nanosheet, and has the potential to reduce energy usage by 85 percent.
- Dassault Systèmes and NTT Communications Announce Alliance for Sustainable Smart Cities in Japan. Alliance combines 3DEXPERIENCE platform with NTT's Smart Data Platform for City transformation for energy use and optimized mobility.



Materials

Materials are made from a combination of different metals and elements. Most metals are non-replenishable resources and their proper and environment-friendly use and reuse is essential. There are two ways materials can be leveraged for sustainability: by changing the materials we use and by savings in material usage.

- Material Mix: Swapping the materials we use with more environment-friendly options across products, processes, and places. Some examples in Q4, 2021
 - AFRY strengthens Plastics Recycling competences
 - The new MacBook Pro is now made from 100% recycled aluminum in the enclosure and zero waste
 - Atos announces a global partnership with Circular Computing, the world's premium remanufacturer of carbon neutral laptop products. The BSI Kitemark™ certifies that the Circular Remanufacturing Process delivers a laptop that has 'at least equivalent performance and warranty that is equivalent or better than that of the newly manufactured product'.

- LG Chem-GS Caltex Signs Joint Development Agreement for Eco-friendly Materials including developing mass production technologies for 3HP, which is a biodegradable plastic material, and for producing prototypes
- Evonik has invested in Singapore start-up Revivo BioSystems to support the development and commercialization of a technology that uses a realistic 4D model of human skin for the testing of chemical, cosmetic and pharmaceutical compounds. Testing on 4D skin models is a more sustainable and ethical alternative to using animals
- TotalEnergies and Plastic Omnium Sign a Strategic Partnership to Accelerate Development of Recycled Plastic Materials in the Automotive Industry
- Belgian sustainable sunglass maker Yuma Labs is truly focused on a circular economy as the company's specs are made from plastic reclaimed from the ocean—old bottles and nets, specifically.
- ExxonMobil Chemical Company has acquired California-based Materia, Inc., a technology company that has pioneered the development of a Nobel prize-winning technology for manufacturing a new class of materials. The innovative materials can be used in a number of applications, including wind turbine blades, electric vehicle parts, sustainable construction, and anticorrosive coatings.
- ExxonMobil plans to build its first, large-scale plastic waste advanced recycling facility in Baytown, Texas. It will be largets recycling facility in North America.
- Coca-Cola Collaborates with Tech Partners to Create Bottle Prototype Made from 100%
 Plant-Based Sources
- Evonik acquires sustainable botanicals pioneer Botanica as the next step towards leading the active cosmetic ingredients market
- LG Chem and LG Energy Solution Makes Equity Investment in North America's Largest Battery Recycling Company, 'Li-Cycle'
- Material Savings: Increased savings in material usage across products, processes, and places. Some examples in Q4, 2021.
 - World's first sustainable 5G-enabled smartphone by Fairphone marketed by Deutsche
 Telekom. It is with five-year warranty, electronic waste-neutral and fair materials.
 - Renault to create a 'Refactory' in Spain. In order to convert the potential value generated by the circular economy this will be structured around four areas of activity, from maintenance to recycling, in order to support the entire life of the vehicle: Re-Trofit, Re-Energy, Re-Cycle, Re-Start.
 - Pirelli is researching the potential of virtual reality, materials (with the development of innovative solutions and modelling of mixing processes) and product and cyber

- development (with integrated static or dynamic simulation and innovative modelling) for next generation of tires.
- Holcim announces Africa's largest 3D-printed affordable housing project in Kenya. This
 project was made possible by Holcim's proprietary ink, TectorPrint, giving the walls
 structural function to bear the load of the building. This breakthrough will accelerate the
 scale-up of 3D printing for affordable housing.
- Nissan unveiled a production line at its Tochigi Plant featuring the Nissan Intelligent Factory initiative including use of robots and net zero production system.



Pollution

Pollution is one of the major concerns for sustainability, and it is imperative to reduce pollution. Many enterprises aspire to be net-zero emissions enterprises. Some examples in Q4, 2021

- HERE, Bosch, working with TfL, improves air quality in London by enabling environmentally friendly traffic management. It contributed to 20% reduction in NOx exposure
- ABB Ability Genix Datalyzer is a cloud-based data analytics solution for fleet-wide management and optimization of emissions monitoring equipment in highly regulated industries like cement, steel, chemicals and power generation. The new solution pre-empts plant failure and helps achieve emissions compliance, improving plant uptime and process safety
- AVL and SuperTurbo Technologies announced that they will collaborate on a project to investigate the emission reduction possibilities of the hydrogen internal combustion engine (H2ICE) on commercial vehicles.
- Ricardo will be continuing to provide key air quality monitoring and data analysis in the
 Middle East with a new three-year agreement. Working in collaboration with air monitoring
 equipment supplier, Envirozone LLC, Ricardo will quality assure, audit and ratify data from a
 world class monitoring network in Saudi Arabia's capital for the Royal Commission for
 Riyadh City (RCRC).
- HERE announced the launch of the HERE ISA Map, delivering vehicle systems and drivers
 fresh and accurate speed limit information on any road. The HERE ISA Map was designed for
 automakers to comply with requirements under the European Union's (EU) new Intelligent
 Speed Assistance (ISA) regulation aimed at road safety and reducing Co2 emissions.
- Spanish researchers demonstarted combining drones with e-nose, there are possibilities in optimizing waste management by detecting odor stinks.
- AVEVA and ABS Join Forces to Unlock Real-time Digitalization and Decarbonization Insights for Shipping Industry
- Saab Signs Contract for new Underwater Electric Robot to Ocean Infinity.

- India's first low emission zone is coming up in Bhubaneswar supported by Ricardo.
- MHI Receives Order for Compact CO2 Capture System for Biomass Power Plant in Hiroshim.
 First Adoption in Commercial Plant; Innovative Modular Design Supporting Decarbonization in Industrial Applications.
- Mitsubishi Shipbuilding Successfully Separates and Captures CO2 from Exhaust Gas in World's First Marine-based CO2 Capture System Project. Captured CO2 Has Purity Greater than 99.9%. The captured CO2 can be used in a wide range of applications, including chemical processes to enhance production of fertilizer or methanol, general use such as dry ice for cooling, and enhanced oil recovery (EOR) to increase crude oil production.
- Mitsubishi Heavy Industrieshas invested in Cemvita Factory, a Houston-based startup that
 utilizes innovative synthetic biology to decarbonize heavy industries such as chemical
 manufacturing, mining, and oil and gas. Its bio-manufacturing platform mitigates emissions
 from traditionally energy-intensive chemical and catalytic conversion processes.
 Additionally, this same technology can turn polymer production into a low-carbon activity by
 utilizing CO2 as a feedstock, a crucial step in building a circular carbon economy.
- ExxonMobil and Pertamina to evaluate carbon capture and storage in Indonesia
- For a carbon-neutral mobility Volkswagen enters into a strategic partnership with EIT
 InnoEnergy



Water

Water is one of our fundamental needs. We require it directly and as an input for many processes and maintenance of places. Its efficient use is essential for sustainability. There are two ways water can be leveraged for sustainability: by changing the water mix and by savings in water usage.

- Water Mix: Many enterprises are changing their water mix by treating and reusing water, which was not possible earlier either due to technology, cost, or convenience. Some examples in Q4, 2021.
 - The Canadian mining company Sigma Lithium has concluded a six year purchase agreement for battery-grade lithium concentrate with LG Energy Solution. Sigma Lithium will use an environmentally friendly process to produce battery-grade lithium concentrate that is "100% clean energy, uses no hazardous chemicals, recycles 100% of the water and dry stacks all waste.
 - Abengoa advances in the commissioning of the Rabigh 3 desalination plant and produces its first desalinated water in Saudi Arabia

- Water Savings: The efficiency of water usage can be increased by reducing water wastage. Some examples in Q4, 2021
 - UMPI to deploy IoT-based Wipro Sewage Monitor Solution for Efficient Wastewater
 Management and Sustainability



Food/Forest

There are two ways food or forest can contribute to sustainability. The first way is by changing the food or forest mix and the other is by reducing waste in food/forest.

- Food/Forest Mix: There are sustainable alternatives for food. Some examples in Q4, 2021
 - Cell-based technology company TurtleTree Labs has announced the opening of its new R&D facility located in West Sacramento, California. TurtleTree uses innovative cell-based technologies to create sustainable food and dairy. The company created a proprietary technology that uses mammalian cells to produce milk, with no animals needed.
 - Signify Acquiring Fluence from OSRAM for \$272 Million to strengthen Agriculture lighting growth platform
- Food/Forest Wastage Reduction: Food wastage can be reduced with proper planning. Some examples in Q4 2021.
 - UST Develops IoT Temperature Monitoring Solution for Malaysian Retail Grocer Mydin. UST
 Cold Truth automates in-store refrigerator temperature monitoring to improve the
 supermarket's efficiency, food safety, and responsiveness. Solution helps to prevent food
 waste, save labor, and exceeds regulatory requirements
 - Bayer, Microsoft Enter into Strategic Partnership to Optimize and Advance Digital
 Capabilities for Food, Feed, Fuel, Fiber Value Chain. Bayer agronomic expertise and leading
 digital farming platform Climate Fieldview, combined with Microsoft Azure, form the
 foundation for new digital solutions to advance agriculture and adjacent industries
 - Infineon and Rainforest Connection create real-time monitoring system to detect wildfires in some of the world's most vulnerable forests. RFCx will explore the use of Infineon's gas sensing technologies to elevate and expand upon the capabilities of their current acoustic listening devices used to monitor and protect vulnerable rainforest ecosystems.

Overall Sustainability Ecosystem

There are some activities in the overall sustainability ecosystem where enterprises and engineering service providers are involved. Some examples in Q4, 2021

- US Coalition on Sustainability Partners with Thoughtworks to Advance the United Nations
 Sustainable Development Goals. USCS' ground-breaking tech for good platform,
 SustainChain™, brings together over 1,000 innovators, investors, businesses and other public
 and private organizations to rapidly advance efforts to rebuild global supply chains to be
 more sustainable.
- Fedrigoni Group Selects JAGGAER for the Digital Transformation of Procurement Processes including incorporating sustainability
- Tesla could get revenue boost by helping Jaguar Land Rover with emissions pact. Tesla
 earned an estimated total revenue of \$1.15 billion in the first nine months of this year by
 helping other automakers comply with EU's stricter emissions regulations.
- Capgemini develops impact measurement tool to support Red Eléctrica's Circular Economy
 Roadmap
- Accenture and Envision Partner to Help Clients Accelerate Transition to Net-Zero
- Capgemini announces the acquisition of Possible Future, one of the main players in sustainable innovation consulting based in Paris
- Thoughtworks builds a Fractionalized Offset Management (FOM) system for Tradewater.
 FOM enables Tradewater to provide its subscribers with web-based tools to measure the carbon impact and trade carbon credits
- Pavilion Energy, QatarEnergy And Chevron Launch GHG Reporting Methodology For Delivered LNG Cargoes
- ADVA launches sustainable supplier program to tackle CO2 emissions. Suppliers who meet
 ADVA's strict sustainability standards will be rewarded with financial incentives.
- TietoEVRY supports the city of Gothenburg's drive for greener and fossil-free operations with leasing and asset finance platform which will promote asset tracking and reusability.
- Accenture Acquires Zestgroup to Help Clients Procure a More Sustainable Future.
 Headquartered in the Netherlands, Zestgroup brings more than 120 professionals to
 Accenture Operations, with clients in a variety of sectors and deep expertise across energy transition and reconciliation, supplier market regulations, renewable spending category and project and procurement services.

Bottom line: Sustainability is picking up across industries and sectors.

In Q4 2021, we see

- Sustainability programs and announcements accelerated compared to last two quarters
- The focus is more on energy, materials and pollution areas.
- More interest in materials compared to last two quarters.
- Enterprises are more active than service providers.
- Service providers have started declaring sustainability related deals.
- European engineering service providers are doing better than others in sustainability engineering offerings.
- Global MNCs are doing better in overall sustainability ecosystem.

We will keep you updated on sustainability trends in future quarters. Keep watching this space.

About the Author



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Pareekh Jain is CEO and Lead Analyst of EIIRTrend and Pareekh Consulting.

EIIRTrend is an information platform for discovering engineering, IoT, Industry 4.0 and R&D (EIIR) trends, information, insights, best practices, across 12 industry segments, 24 service segments, 50+ countries and 2000+ providers and buyers.

Pareekh Consulting is a focused analyst and advisory firm for EIIR.

A seasoned EIIR professional, Pareekh has seen the EIIR industry from four perspectives: service provider, sourcing advisor, enterprise buyer, and industry analyst.

He is regularly quoted in media on EIIR trends. Some of the media publications he is quoted in include Harvard Business Review (HBR), NDTV, Times of India, Economic Times, Business Standard, Hindu, Business Line, Livemint, Indian Express, Financial Express, Deccan Herald, Bizzbuzz, Rediff, Voice of America, Moneycontrol, Quartz, Business Today and Business Insider.

Pareekh is a thought leader, having authored various publications on topics related to EIIR outsourcing. He loves business fiction writing in his free time, and has authored a novel, Who Is That Lady?

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