

OCTOBER

2018

D A u t o N e w s l e t t e r

Edition
2018



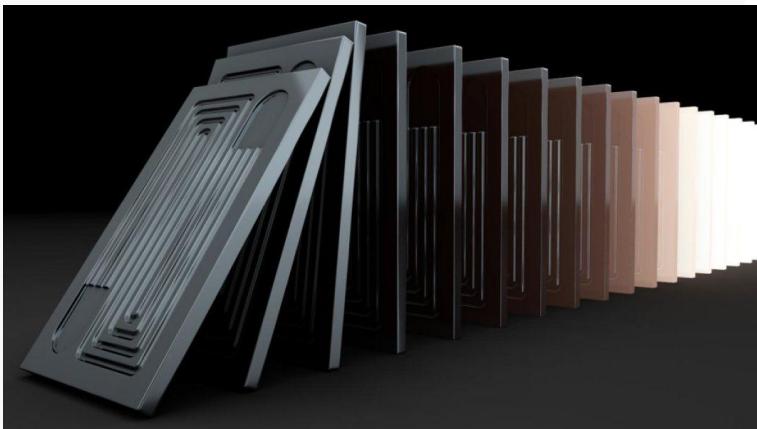
“ Design engineers turn designs into reality. Without them, a great idea but nothing more than,... well, a great idea. ”



September 2018 refresh

- ✓ Renault EZ-PRO Concept Envisions Robo-pods System For Last Mile
- ✓ Delivery
- ✓ NASA blasts off space laser satellite to track ice loss
- ✓ New 3D-printed cement paste gets stronger when it cracks -- just like structures in nature
- ✓ Polymer coating cools down buildings
- ✓ Infiniti Prototype 10 is an electric speedster for the modern era
- ✓ Glow-in-the-dark paper as a rapid test for infectious diseases
- ✓ Volvo Trucks Vera shows the future of autonomous commercial vehicles
- ✓ A self-powered heart monitor taped to the skin

New material, manufacturing process use sun's heat for cheaper renewable electricity



Two materials showed promise together as a composite: The ceramic zirconium carbide, and the metal tungsten.

Purdue researchers created plates of the ceramic-metal composite. The plates host customizable channels for tailoring the exchange of heat, based on simulations of the channels conducted at Georgia Tech by Devesh Ranjan's team.

Mechanical tests by Edgar Lara-Curcio's team at Oak Ridge National Laboratory and corrosion tests by Mark Anderson's team at Wisconsin-Madison helped show that this new composite material could be tailored to successfully withstand the higher temperature, high-pressure supercritical carbon dioxide needed for generating electricity more efficiently than today's heat exchangers.

An economic analysis by Georgia Tech and Purdue researchers also showed that the scaled-up manufacturing of these heat exchangers could be conducted at comparable or lower cost than for stainless steel or nickel alloy-based ones.

"Ultimately, with continued development, this technology would allow for large-scale penetration of renewable solar energy into the electricity grid," Sandhage said. "This would mean dramatic reductions in human-made carbon dioxide emissions from electricity production."

Solar power accounts for less than 2 percent of U.S. electricity but could make up more than that if the cost of electricity generation and energy storage for use on cloudy days and at nighttime were cheaper.

A Purdue University-led team developed a new material and manufacturing process that would make one way to use solar power -- as heat energy -- more efficient in generating electricity. The innovation is an important step for putting solar heat-to-electricity generation in direct cost competition with fossil fuels, which generate more than 60 percent of electricity in the U.S. "Storing solar energy as heat can already be cheaper than storing energy via batteries, so the next step is reducing the cost of generating electricity from the sun's heat with the added benefit of zero greenhouse gas emissions," said Kenneth Sandhage, Purdue's Reilly Professor of Materials Engineering.

The research, which was done at Purdue in collaboration with the Georgia Institute of Technology, the University of Wisconsin-Madison and Oak Ridge National Laboratory, published in the journal *Nature*.

This work aligns with Purdue's Giant Leaps celebration, acknowledging the university's global advancements made for a sustainable economy and planet as part of Purdue's 150th anniversary. This is one of the four themes of the yearlong celebration's Ideas Festival, designed to showcase Purdue as an intellectual center solving real-world issues.

Solar power doesn't only generate electricity via panels in farms or on rooftops. Another option is concentrated power plants that run on heat energy.

Concentrated solar power plants convert solar energy into electricity by using mirrors or lenses to concentrate a lot of light onto a small area, which generates heat that is transferred to a molten salt. Heat from the molten salt is then transferred to a "working" fluid, supercritical carbon dioxide, that expands and works to spin a turbine for generating electricity.

To make solar-powered electricity cheaper, the turbine engine would need to generate even more electricity for the same amount of heat, which means the engine needs to run hotter. The problem is that heat exchangers, which transfer heat from the hot molten salt to the working fluid, are currently made of stainless steel or nickel-based alloys that get too soft at the desired higher temperatures and at the elevated pressure of supercritical carbon dioxide. Inspired by the materials his group had previously combined to make "composite" materials that can handle high heat and pressure for applications like solid-fuel rocket nozzles, Sandhage worked with Asegun Henry, now at the Massachusetts Institute of Technology, to conceive of a similar composite for more robust heat exchangers.

Edition

October 2018

The Statue of Unity to be inaugurated on 31st Oct. 2018



Height : 182 Meters (597 feet)

Cost: ₹ 2,989 Crore (US\$420 million)

The world tallest statue of Sardar Vallabhbhai Patel project set into motion five years ago, when Narendra Modi, then the chief minister of Gujarat, had laid the foundation stone in the month of October in 2013. The massive icon is slated to be inaugurated on October 31 on the occasion of the 143rd birth anniversary of Sardar Vallabhbhai Patel.

Once finished, Patel's icon would stand tall some 200 kilometers away from the state capital Ahmedabad and it will be surrounded by the Narmada river. The statue is coming up at Sadhu Bet at Kevadiya Colony near the Sardar Sarovar Dam in Narmada district. The statue of unity will be taller than the statue of liberty, which is of only 93 meters. Statue would be the biggest India news on 31st Oct. 2018.

The world's tallest icon of all the 182-meter statue of freedom fighter Sardar Vallabhbhai Patel called the 'Statue of Unity', is almost complete. Patel statue to be inaugurated on October 31, 2018, on the birth anniversary of Sardar Vallabh Bhai Patel. The statue dedicated to Sardar Vallabhbhai Patel, the statue will not only remind every individual of our great nation freedom struggle but will also inspire the nation. Sardar Vallabhbhai Patel also called as the "Iron Man of India".

The Statue of Unity is a monument about completion dedicated to Indian independence movement leader Vallabhbhai Patel. Tall statue located in the Indian state of Gujarat. With a planned height of 182 meters tall (597 ft), it will be located facing the Narmada Dam. 3.5 km away on the river island called Sadhu Bet Island near Vadodara in Gujarat. This statue will occupy over 20,000 square meters and will be surrounded by a 12 square km artificial lake. It will be the world's tallest statue when completed.

Sardar Vallabhbhai Patel Rashtriya Ekta Trust (SVPRET), a special purpose vehicle was established by the Gujarat government and the outreach programme was carried out across India starting December 2013. The foundation stone was laid down by the then chief minister of Gujarat, Mr. Narendra Modi in 2013. The statue and premises will be having world-class facilities for the visitors.

The statue of unity will be the symbol of the country for the unity. The chief minister Vijay Rupani has recently visited the construction site and monitored the progress of the construction work. Vijay Rupani said the BJP had collected iron, soil and water from across the country to use them to build the "Statue Of Unity" in the state, a decision announced by PM Modi in 2013.

Nation's political and social leader Sardar Vallabhbhai Patel's visionary ideologies of patriotism, unity, inclusive growth and good governance. This monument will not just be a mute memorial like the rest, but a fully functional, purpose-serving tribute that will spur all-round socio-economic development. It will inculcate Sardar Vallabh Bhai Patel ideologies in public's mind.

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The Statue of Unity to be inaugurated on 31st Oct. 2018

Project Cost:

Initially, the total cost of the project was estimated to be about ₹3,001 crore (US\$420 million) by the Indian government. Later Larsen & Toubro won the contract in October 2014 for its lowest bid of ₹2,989 crore (US\$420 million) for the design, construction, and maintenance. The construction was started on 31 October 2014. The statue is near completion. It will be inaugurated on 31 October 2018 by Prime Minister Narendra Modi.

Some highlights of this project:

Bronze cladding on the Statue.

Fast elevators to reduce transit time for visitors.

The three-level base of the Statue – exhibit floor, mezzanine, and roof – will contain a Memorial Garden and a large continuous museum/exhibition hall, comprising exhibits that focus on the life and contributions of Sardar Vallabhbhai Patel.

The observation deck, situated at a height of around 500 ft from the river bed, will accommodate up to 200 people at a time. It will provide visitors a panoramic view, enabling them to see the beautiful Satpura and Vindhya mountain ranges, the 212 km long Sardar Sarovar Reservoir, and the 12 km long Garudeshwar Reservoir.

For the comfort of the visitors against high wind forces, a 400-ton Tuned Mass Damper system has been provided above the observation deck.

Access to the Statue via a 5 km boat ride.

A large modern canopied public plaza, overlooking the Narmada River and the Statue, comprising food stalls, ornate gift shops, retail kiosks, and other amenities, that will provide visitors a well-rounded tourist experience.

Project Features:

Shrestha Bharat Bhavan

Shrestha Bharat Bhavans designed to be approximately 52-key, providing a 3-star facility on two guestroom levels above a public floor containing meal services, a ballroom, and other meeting and event spaces. King rooms and suites are located on the river side of the building, where they have access to balconies overlooking generous gardens.

The simple and modern architectural character of the Shrestha Bharat Bhavan is complemented by lush plantings along the balconies, linking the building to the landscape and reinforcing the environmental theme of the development.

Distinctive and dramatically lit architectural elements, such as the circular stair hall facing the garden and river, create a special guest experience as well as a memorable image of the Hotel.

Museum & Audio Visual Gallery

The Statue of Unity Project will also include a unique museum and audio-visual department depicting the life and times of Sardar Vallabhbhai Patel.

A Laser, Light and Sound show

Laser, Light and Sound show on the efforts of Unification of India.

Research center

A research center dedicated to the research and development of subjects close to Sardar Vallabhbhai Patel's heart like Good Governance and Agriculture Development. Here, subjects like Water Management and Tribal Development will also be studied and researched.

A Monumental View

A heavy-load open lift with a panoramic view will be built alongside the Statue of Unity. Visitors will be able to rise up within the statue, walk into a viewing gallery and enjoy a panoramic view of the Sardar Sarovar Nigam project and the surrounding region from an astounding height of close to 400ft.

Hospitality & Entertainment

Refreshment areas like restaurants and recreational spots to make the project area an attractive tourist spot, thus facilitating tourism and employment for the surrounding tribal region.

Ferry Services

The statue and surrounding area will be accessed by special boats to avoid vehicular traffic and pollution

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The Statue of Unity to be inaugurated on 31st Oct. 2018

In the first phase of □2,989 crore (US\$420 million) project, □1347 crore is for the main statue, □235 crore for exhibition hall and convention center, □83 crore for the bridge connecting the memorial to Sardar Vallabhbhai to the mainland and □657 crore for the maintenance of the structure for 15 years after its completion.

Accenture provides digital media outreach programme. The monument is designed by Ram V. Sutar. The statue will be inaugurated by PM Modi on 31st October 2018. Companies like Turner Construction and L&T construction have built the world tallest statue. The statue of unity inauguration will be a grand ceremony in India.

Construction Technology

Sophisticated state of art technologies like Light Detection and Ranging Technology and Telescopic logging to assess rock joint is adopted. Statue development through four stages of Mockup, state of the art three-dimensional scanning technique and computer numerical control production technique adopted to ensure accurate reproduction of minute details. Approximately 1850 Metric Ton of Bronze cladding shall be erected without any external staging. The statue of unity progress 2018 is, it is almost complete and inaugurated on 31st October 2018 by Prime Minister Narendra Modi.

Run for Unity:

Run for Unity is encourage India to run together in a tribute to Sardar Patel. Shri Narendra Modi marked the birth anniversary of Sardar Vallabhbhai Patel, that is, October 31st as 'Rashtriya Ekta Diwas' (National Unity Day) to commemorate his legacy. On the very same day, the 'Run for Unity' Marathon was flagged off, with the aim of having every Indian run together in a tribute to Sardar Patel.

Construction of Statue of Unity:

A consortium of Turner Construction (project manager of Burj Khalifa), Michael Graves and Associates and Meinhardt Group, is supervising the project. It will take 56 months to complete the project; 15 months for planning, 40 months for construction and two months for handing over by the consortium. The total cost of the project was estimated to be about □2,063 crore (US\$290 million) by the government. The tender bids for the first phase were invited in October 2013 and were closed in November 2013.

The then Gujarat Chief Minister Narendra Modi, (currently the Prime Minister of India) laid the foundation stone of statue on 31 October 2013, the 138th birth anniversary of Sardar Vallabhbhai Patel. He along with L.K. Advani announced to the public that after completion of the project, it will be the tallest statue of the world. The statue of unity completion date is 31st October 2018.

A mixture of concrete and steel will act as a skeleton for the massive statue and bronze panels will be used on the exterior. According to an Indian Express report, the contract for the steel framework has been handed over to the Malaysia-based Eversendai, which has constructed Burj Al Arab and Burj Khalifa – Dubai's famous highrises. For the bronze work, the TQ Art Foundry has designed about 5,000 bronze panels under the supervision of artist Ram Sutar that have been assembled at a workshop on the site before being clad to complete the facade in stages, adds the same report.

Indian infrastructure company Larsen & Toubro won the contract on 27 October 2014 for its lowest bid of □2,989 crore (US\$420 million) for the design, construction, and maintenance. They commenced the construction on 31 October 2014 and is expected to complete it by 2018. Initially, Turner construction was the statue of unity contractor.

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Global Megaprojects: Beijing Daxing International Airport

Beijing Daxing International Airport



Beijing Daxing International Airport



Current Status:

Chinese government has recently announced the opening date for the Beijing Daxing International Airport. According to the authorities, It is expected the airport will officially begin operations on 1st October 2019. It is also speculated the new airport which has not received any official name yet will accommodate 620,000 flights per year.

Beijing Daxing International Airport is a new airport construction project which will serve Beijing, China. The project is expected to cost CNY80 billion (USD13.1 billion) in total, with construction work commenced in Dec-2014. Once completed in 2019, the airport will have capacity to handle 45 million passengers p/a during the initial stages, 70 million passengers by 2025 with plans for expanding the facility into an airport capable of handling 100 million passengers p/a. Meanwhile, an air transport-related economic zone is also planned, with an investment of CNY84 billion (USD13.4 billion). This figure is still speculative.

Asia's Current Aircraft Fleet:

According to Edward Clayton's report on Airport Infrastructure in Asia, Development of Asia's airport

infrastructure has lagged behind travel growth. Traffic at most major Asian hubs is already exceeding

planned capacity whilst even secondary hubs are starting to experience capacity strains. Since the large surge in Asian airport developments in the 1990s, infrastructure has rarely been built ahead of demand. This is a cause for concern, owing to Asia's predicted high rate of growth and given that runway and terminal projects typically require 5-10 years from need recognition to implementation.

As a consequence, congestion-related delays are rapidly increasing at most Asian hubs.

Passengers experience increasingly common flight delays, long queues for take-off, and circling of aircraft in stacks prior to landing. Availability of suitable landing and take-off slots is suddenly becoming scarce, leaving airports unable to cope with any further growth, and leaving airlines with nowhere to operate their newly delivered aircraft. Therefore, it is not surprising that in 2013, only 57% of departures from Asian airports were on time. This number is considerably lower than for airports in North America and Europe, which boast 79% and 73% of departures on time, respectively.

Beijing spent USD3.5 billion to build what was the world's largest airport passenger terminal. However, China's national planning agency has given the go-ahead to a new airport that will cost nearly four times as much. Beijing International Airport's Terminal 3 was built just in time for the Beijing Olympics in Mar-2008. It is a sprawling 10.6 million square foot complex. Despite the major expansion, Beijing International Airport, Asia's busiest, has struggled to handle passengers, leading to delays that have become legendary among frequent travellers. Beijing Airport reached its design capacity in 2013 of 75 million. The airport plans to complete overall construction in Jul-2019 and commence trial operation in Sep-2019.



Kia Confirms New Compact Crossover For U.S. Market, "Maybe Small Pickup Truck"



“But wait, doesn’t Kia have the Sportage in the compact crossover segment already?” You’re right, dearest reader! So in the meantime, here’s hope the mystery model looks better than the [Stonic](#).

As you’re well aware, Kia has announced the Telluride for the 2020 model year. But as it happens, the large SUV with three rows of seats isn’t the only new product in the pipeline.

According to Han-Woo Park, the South Korean automaker expects to take more market share in the United States with the help of a compact crossover. The chief executive officer told the newcomer would arrive in the second half of the year, right after the Telluride starts production.

“After those launches, Kia will consider other light-truck entries,” according to Park, “and maybe a small pickup.” Hyundai is working on the Santa Cruz for the U.S. market - unibody construction and everything - and we have a sneaking suspicion that Kia will use the underpinnings for its own truck.

The Palisade, for example, shares the platform, engine, and transmission with the Telluride. And just like the Kia, this model has been confirmed with seating for eight people. The thing with the Palisade is that Hyundai will manufacture it in South Korea, not Georgia like Kia with the Telluride.

Turning our attention back to the Santa Cruz, Hyundai is expected to build it “on the same platform as the next-generation Tucson.” Expected to go official in South Korea in 2020, the compact crossover would then welcome the pickup truck “as early as 2021” according to Won-hee Lee, chief executive officer of Hyundai Motor Co.

The Santa Cruz is in the “basic R&D stage” at the time of writing, and production would be underway in “about 32 months” if the newcomer gets the green light from the higher-ups in South Korea. Considering that Honda is alone in the segment with the Ridgeline, Hyundai has to deliver on its promise if it wants to steal some sales from the Japanese brand.

The crossover is understood to bear the name Tusker in India, where it will be manufactured at a \$1.1-billion assembly plant in Anantapur, Andhra Pradesh. The North American sibling would be sourced from South Korea, and for this market, Kia is understood to choose anything between Trazor and Trailster.

ENGIE and STOA to jointly develop 2 GW of wind energy in India



Founded in 2017, the STOA 600M€ investment fund leverages the strengths and extensive experience of its two shareholders. The Caisse des Dépôts brings a long and proven investment track record and the French Development Agency in depth knowledge of STOA's targeted markets.

ENGIE and STOA have announced a partnership to build a wind platform in India through a Joint-Venture detained 50/50 by the two entities. The Joint Venture Agreement was signed by STOA's CEO, Charles-Henri Malecot, and ENGIE Directors.

According a press release published by French Embassy in New Delhi, the wind platform has a goal of setting up over 2 GW of wind energy capacity over the next 5 years. Scope will be both onshore and offshore wind projects under central and select state tenders.

Earlier this year, Engie has won a capacity totaling 280 MW in 3 separate state and central tenders in India. These 3 projects, which are currently in implementation stage (200 + 50 MW in one location in Tamil Nadu state and 30 MW in Gujarat state) will form a part of the Platform.

Commenting on the partnership, Malcolm Wrigley, Country Manager ENGIE India said, "ENGIE is pleased to join forces with STOA to reinforce its commitment to harmonious progress. Our aim is to respond to the major challenges of the energy transition, in particular in fast-growing countries like India".

Matthew Saville, STOA's Managing Director, added: "The Indian renewables sector has seen strong growth and demand for power across the country will continue to increase. Wind power generation today offers a competitive solution to lower average power pool prices. We are delighted to be working with ENGIE to deliver clean and affordable power to the country".

The ENGIE Group is the largest independent electricity producer in the world with 115.3 GW of installed capacity, of which 22% is from renewables. The development of wind power projects is one of ENGIE's priorities. It is now the largest wind power producer in France and Belgium and an international leader with 4,553 MW installed throughout the world.

Global Megaprojects: Hudson Yards



The neighborhoods surrounding Hudson Yards, including Chelsea, West Chelsea and Hell's Kitchen are buzzing with chic art galleries, innovative restaurants and bars, and highly respected international fashion and design. City dwellers hungry for a taste of the outdoors now have a variety of green spaces to explore including the much-celebrated High Line, Hudson River Park and Hudson Park & Boulevard. With the new No. 7 Subway extension open as of fall 2015, getting to Hudson Yards will be fast and easy.

Hudson Yards is the largest private real estate development in the history of the United States and the largest development in New York City since Rockefeller Center. The site will include more than 18 million square feet of commercial and residential space, state-of-the-art office towers, more than 100 shops including New York's first Neiman Marcus, and a collection of restaurants curated by Chef Thomas Keller. The urban development will include approximately 4,000 residences, The Shed, a new center for artistic invention, 14 acres of public open space, a 750-seat public school and an Equinox Hotel with more than 200 rooms—all offering unparalleled amenities for residents, employees and guests. The development of Hudson Yards will create more than 23,000 construction jobs.

Hudson Yards is the fulfillment of a remarkable collaboration that includes a talented group of visionaries – planners, architects, engineers, designers, public servants, fashion icons, renowned chefs, business leaders, luminaries and more. They are working in partnership with New York's development and transportation authorities, and with some of the world's most iconic retail brands and leading companies – each of whom will call Hudson Yards home.

Strategically located between 10th and 12th avenues from West 30th to West 34th Street, Hudson Yards is the center of the metropolitan region with unsurpassed connections to commuter rail service, the subway system, the West Side Highway, the Lincoln Tunnel and ferries along the Hudson River. The extension of the No. 7 Subway line, opened in 2015, arrives at Hudson Yards' front door. In the nexus of Chelsea and Midtown West, this dynamic neighborhood is next to chic art galleries, award winning restaurants, popular bars and nightlife venues, and highly respected international fashion and design.

COST: \$20 BILLION

ESTIMATED COMPLETION: 2024

ARCHITECT: KOHN PEDERSEN FOX

DEVELOPER: THE RELATED COMPANIES L.P.

OXFORD PROPERTIES GROUP INC.

COLLINGWOOD INC.

Global Megaprojects: Hudson Yards



Hudson Park & Boulevard (\$30 Million)

Hudson Park & Boulevard is a central element of the new Hudson Yards business district. Four acres of broad tree-lined parks and open space will extend from West 33rd to West 39th Street and eventually all the way to West 42nd Street. The first phase was completed in 2015. The new No. 7 Subway station has two entrances to the park.

Public Investment

In order to transform one of Manhattan's last undeveloped areas, the city and state have initiated major investments in mass transit, new parks and cultural and recreational facilities directly adjacent to Hudson Yards. The following public investments have already catalyzed rapid development in the surrounding area and their impact will be especially beneficial for Hudson Yards, situated at the epicenter.

No. 7 Subway Extension (\$2.4 Billion)

A central part of the Hudson Yards rezoning and development program extended the No. 7 Subway west and south from its old terminus at Times Square adding a new station at West 34th Street and 11th Avenue.

Moynihan Station Renovation (\$267 Million)

The renovation of Moynihan Station and construction of a new train station at what is now known as the Farley Post Office will extend Penn Station west to 9th Avenue. The goal of the project is to alleviate pedestrian congestion at Penn Station by allowing passengers to access Amtrak, New Jersey Transit and Long Island Railroad trains across from the existing MSG/Penn Station complex.

Javits Center Renovation (\$465 Million)

The Javits Center has recently completed a renovation into a state-of-the-art complex that will attract more visitors to New York City and further reinvigorate the west side of Manhattan. Major renovations to the main building include a new green roof, curtain wall, skylights, and the enlargement of the main entrances and upgrades to the building's systems.

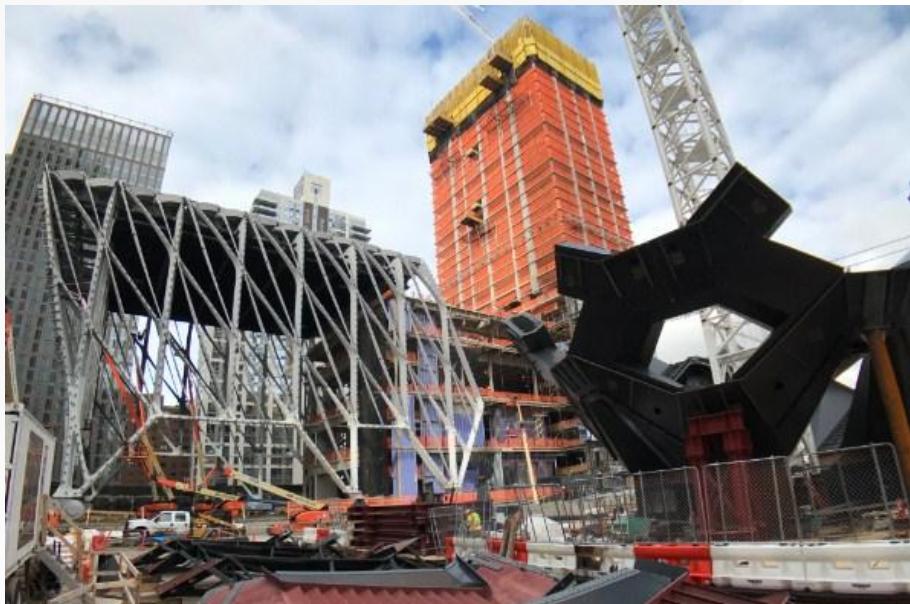
The High Line (\$190 Million)

On September 20, 2012, the High Line broke ground on its third and final section, which wraps around Hudson Yards, extending the park to the northern terminus of 12th Avenue and West 34th Street. Work was finished in 2014.

Hudson River Park (\$440 Million)

Hudson River Park begins at Clinton Cove at West 55th Street and the West Side Highway and extends five miles to Riverside South. With thirteen reconstructed piers and dozens of landscaped acres offering both a tranquil respite and a multitude of active recreation, it's difficult to imagine the New West Side without this amazing park.

Global Megaprojects: Hudson Yards



Project Timeline:

The first complete tower on the site is 10 Hudson Yards, which opened in May 2016. It is fully leased to companies that include Coach Inc., L'Oréal USA, SAP, Intersection, Sidewalk Labs, VaynerMedia and Boston Consulting Group including BCG Digital. 10 Hudson Yards ascends 895 feet with 1.8 million square feet of commercial space. Another prominent skyscraper under construction is 30 Hudson Yards, with 2.6 million square feet. At 1,296 feet high, it will be completed in 2019 as the second tallest office building in New York. 30 Hudson Yards will be home to leading media, business and financial companies including HBO, CNN, Turner Broadcasting, Time Warner, Inc., KKR & Co. and Wells Fargo Securities.

55 Hudson Yards is the third commercial tower. At 780 feet and 1.3 million square feet, it will be home to MarketAxess, Milbank and Boies, Schiller & Flexner, LLP. The office towers are part of the overall master plan that includes 4,000 residences, a new hotel and a dynamic retail space that will feature more than 100 luxury and specialty shops, include Manhattan's first ever Neiman Marcus store. The retail component will include a collection of restaurants, and overlook the enthralling Public Square and Gardens. These components will open to the public in 2019.



Mitsubishi Corporation to acquire 25% stake in Bangladesh LNG receiving Terminal



In addition to this project, Summit and MC have agreed to jointly pursue other projects across the LNG value chain in Bangladesh(*), from LNG supply to power generation. MC intends to simultaneously generate economic, societal, and environmental value by contributing to the stable supply of energy and to further economic growth in Asian countries through business associated with LNG, which has relatively low environmental impact.

* On 13 March 2018, MC and Summit signed a Memorandum of Understanding to pursue jointly an integrated LNG-to-Power development consisting of onshore LNG receiving terminal with a regasification capacity of up to 1,500 million cubic feet per day, associated LNG supply and construction of 2,400 Megawatt gas-powered thermal power plant.

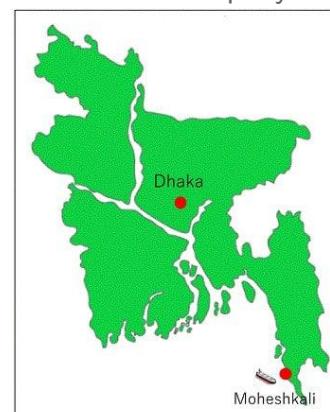
Mitsubishi Corporation (“MC”) has agreed to acquire a 25% interest in Summit LNG Terminal Co (Pvt) Limited (“SLNG”) and to develop a Liquefied Natural Gas (LNG) receiving terminal that uses a Floating Storage and Regasification Unit (FSRU) in Bangladesh. With the acquisition, 75% of SLNG will be held by Summit Corporation Limited (“Summit”) and 25% by MC.

According to recent press release from Mitsubishi Corporation, under the project, SLNG will install an FSRU 6 km off the coast of the island of Moheshkali in the Cox Bazar District of Chittagong Division in Bangladesh, where it will receive and regasify LNG procured by Petrobangla, the national oil and energy company.

Construction of the terminal commenced at the end of 2017 and commercial operations are expected to start in March 2019. The planned LNG import volume is approximately 3.5 MTPA.

Bangladesh, with its expanding population, and an economic growth rate of more than 6% per annum, is also seeing a rapid increase in electricity demand. While gas-based generation accounts for approximately 60% of total generation, domestic natural gas production is starting to decline. The country is therefore promoting LNG imports as part of its national energy policy. Bangladesh will start importing LNG in 2018, with a targeted import volume of 17 MTPA in 2030.

MC has been providing a stable supply of LNG to the market while at the same time developing its power, energy and infrastructure business globally, particularly in Asia where there is rapidly increasing energy demand.



Edition

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Volkswagen Developing Jeep Renegade Rival in America, for America



Volkswagen has figured out that it can't continue to sell European cars to the Americans. That's why the Jetta branch split off from the family tree, and it should be followed by a small crossover to slot below the Tiguan.

According to a new report from Car and Driver, Volkswagen USA is already developing and designing this model in-house with the needs and wants of American consumers in mind. Its target is the Jeep Renegade, which sold over 100,000 units last year, though the Honda HR-V is also being taken seriously.

The small "SUV" segment started kind of diverse and spread out. You had the expensive MINI Countryman, the weird Juke and the Mitsubishi Outlander Sport, a misfit. But it seems most customers want the same thing now: features, space, and the high driving position. The dynamics and off-road capabilities play a much smaller part.

Although it was late to the party, VW already has two small crossovers in Europe, the T-Roc and last week's big debut, the T-Cross. In both cases, it's been confirmed that they won't be sold in America.

We believe the newcomer will be big on space since that's what made the Honda HR-V so successful. The Atlas has shown VW isn't afraid to push the MQB past its limits. The newcomer should use a version of the architecture that's similar to the 2019 Jetta, not to mention most of its internal goodies and the solid rear axle.

If VW doesn't want to return to the 2-liter, a small 1.5-liter turbo with 147 horsepower should be standard with a manual gearbox and front-wheel drive in tow. Prices should also be kept below the \$24,300 of the Tiguan. In any case, the project won't be completed before 2020, which means the German brand will be among the last to join the subcompact crossover segment.



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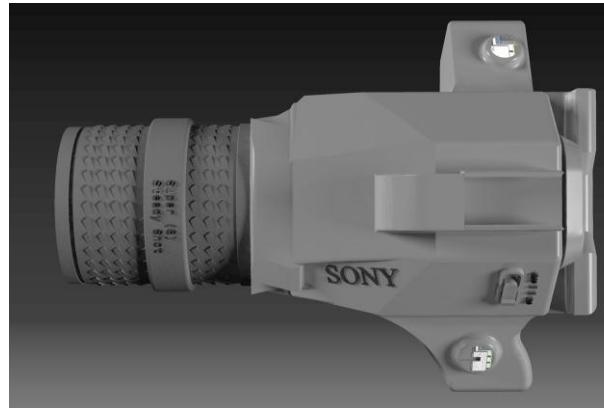
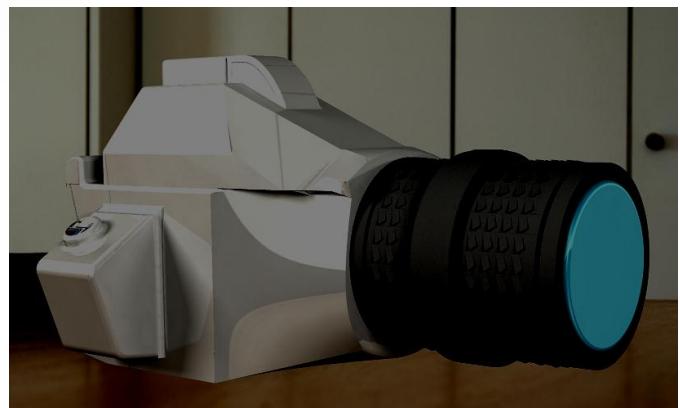
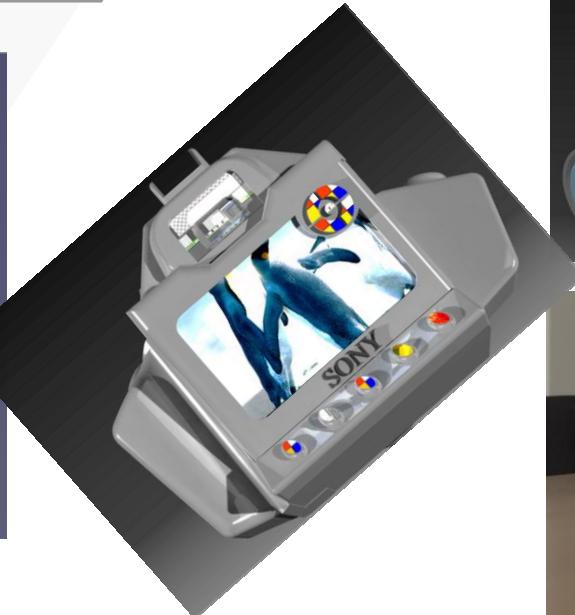
October 2018

Student's Corner

More info about training:

Toll Free # 18001234011

E-mail : training@dauto.co.in



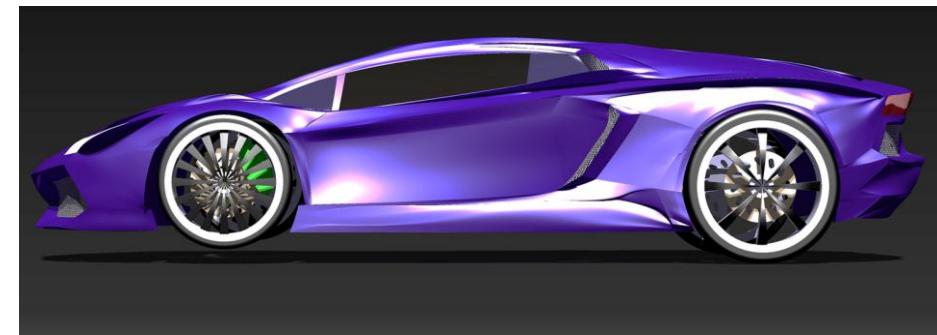
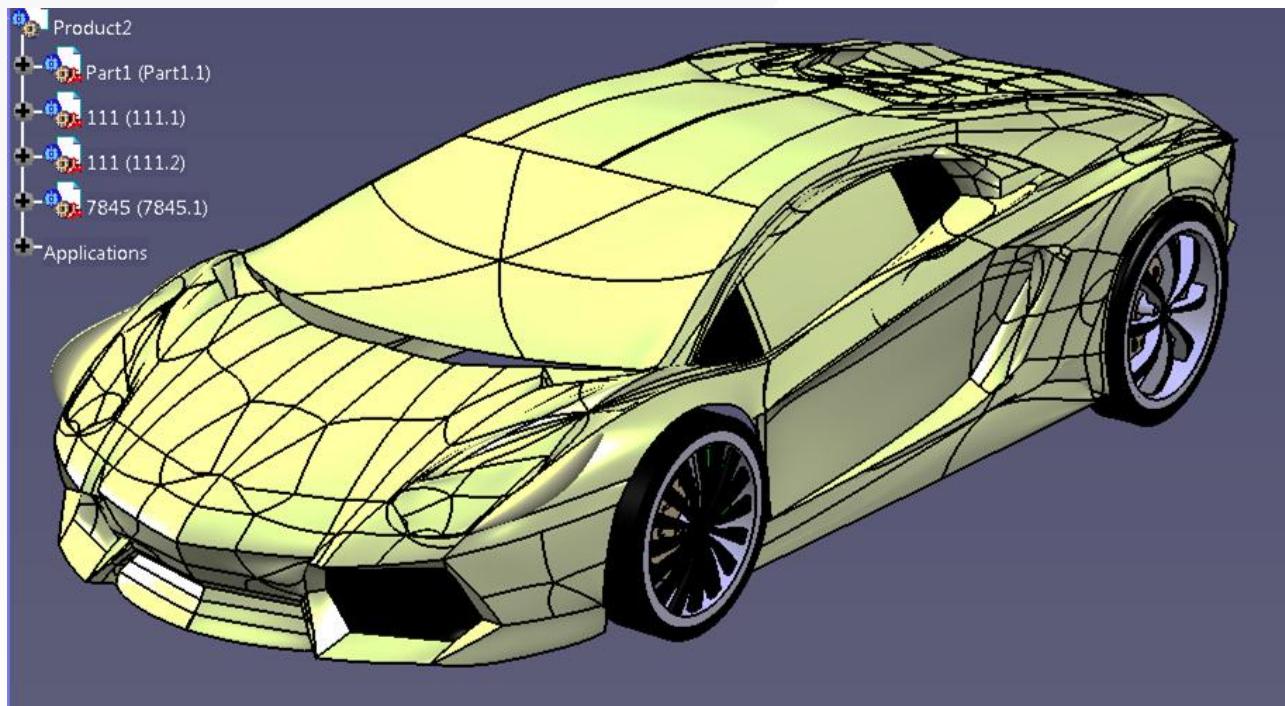
By :
**Ziya-Ul-Haque
Truba, BHOPAL**
Design Tool : CATIA V5.

Edition

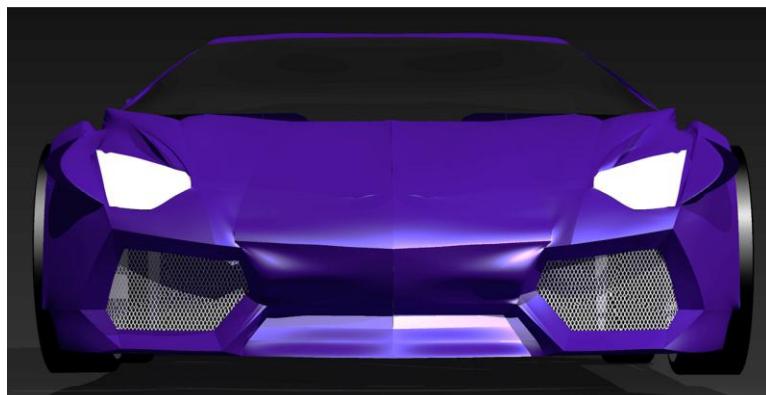
October 2018

Student's Corner

DAuto Training Yield



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“ Never be satisfied with inaction. Question and redefine your purpose to attain progress ”

Jeffrey K. Liker, The Toyota Way

We can be found here



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