

## **Prelim Bits 05-12-2017**

### **First Battery Back-up Project**

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- Andhra Pradesh is planning to develop a 160 MW solar-wind hybrid project with battery back-up facility.

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- This is the first such project to be developed in the country.

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- World Bank is going to fund this project in Anantapur district in AP.

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- Hybrid solar-wind solutions are almost exclusively used to generate electricity.

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- 120 MW of energy will be from Solar and 40 MW from wind turbines.

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- The energy generated by solar and wind turbines will be stored in the hydrogen battery instead of transferring it to grid.

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### **Flink**

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- Functional Living Ink (Flink) is a new printing material developed by scientists from Switzerland.

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- Flink contains different bacteria as ink which makes it possible to print objects with biochemical properties.

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- It allows printing using different inks containing different species of bacteria at different concentrations in order to produce objects exhibiting several properties.

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- The ink is composed of a biocompatible hydrogel along with bacteria to give it a structure.

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- The culture medium for the bacteria is mixed into the ink so that the bacteria have all the prerequisites for life.

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## **Survey on Employment**

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- Currently, there is no fixed definition for “formal” workers.
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- The formal workers definition is highly restrictive which exclude many workers who have decent and steady jobs but either do not work in large enough enterprises or do not have written contracts.
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- Thus a task force led by ex-vice chairman of NITI Aayog Arvind Panagariya was formed.
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- The task force called for a fresh definition of formal employment to include any person who gets a Form 16 reflecting income tax deductions at source.
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- The plan is to include workers covered under any one of The Employees’ State Insurance Act, 1948 and miscellaneous provision Act 1952, government and other public sector employees, workers having coverage under private insurance or pension schemes of PFs.

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## **Netra**

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- Netra is the first indigenously built Airborne Early Warning and Control System (AEW&C) developed by DRDO.
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- It is light-weight autonomous UAV for long range surveillance and reconnaissance operations.
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- This radar system is mounted on Embraer aircraft which gives 240-degree coverage of airspace.
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- It helps to detect and track aircraft, missiles, ships and vehicles.
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- The other countries which have developed AEW&C are United States, Russia

and Israel.

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- For the first time, an IL-78 refueller aircraft has recently carried out air-to-air refuelling of the Embraer aircraft.

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- Air-to-air refuelling allows the aircraft to stay airborne much beyond their limits, allowing better exploitation of capabilities.

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## **IL-78 Refueller Aircraft**

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- It is a multi-purpose four-engine turbofan strategic airlifter designed by the Russia.

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- The IAF is one of the few air forces in the world to operate mid-air refuellers. It now operates six Russian IL-78 refuellers.

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- The name of the air-to-air refuelling method is 'Probe and Drogue'.

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## **Siddu**

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- Siddu is a name given to the new genetic variation of Jack Fruit.

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- It has lycopene content of 2mg per 100 gm of pulp, as against 0.2 mg in normal varieties.

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- It is also rich in anti-oxidants.

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**Source: The Hindu, BusinessLine.**

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