Report of the Activity

Theme of The Event: Online Session on Prototype/Process Design and Development- Prototyping.

Date: 28th November 2022

Total Number of Student's Participants: 55

Program Theme: Entrepreneurship/Leadership/Innovation

About the Event:

The Event was conducted in online mode on Zoom Platform at Pranveer Singh Institute of Technology, Kanpur.
The Students Participated with full enthusiasm. The Objective of the Prototype/Process Design and Development- Prototyping is to provide a brief idea of prototype and about it's important in the manufacturing industry and other sectors. Prototype design and development is an important step in the product development process, as it allows designers and engineers to create a physical or digital representation of their ideas and test them before committing to mass production.

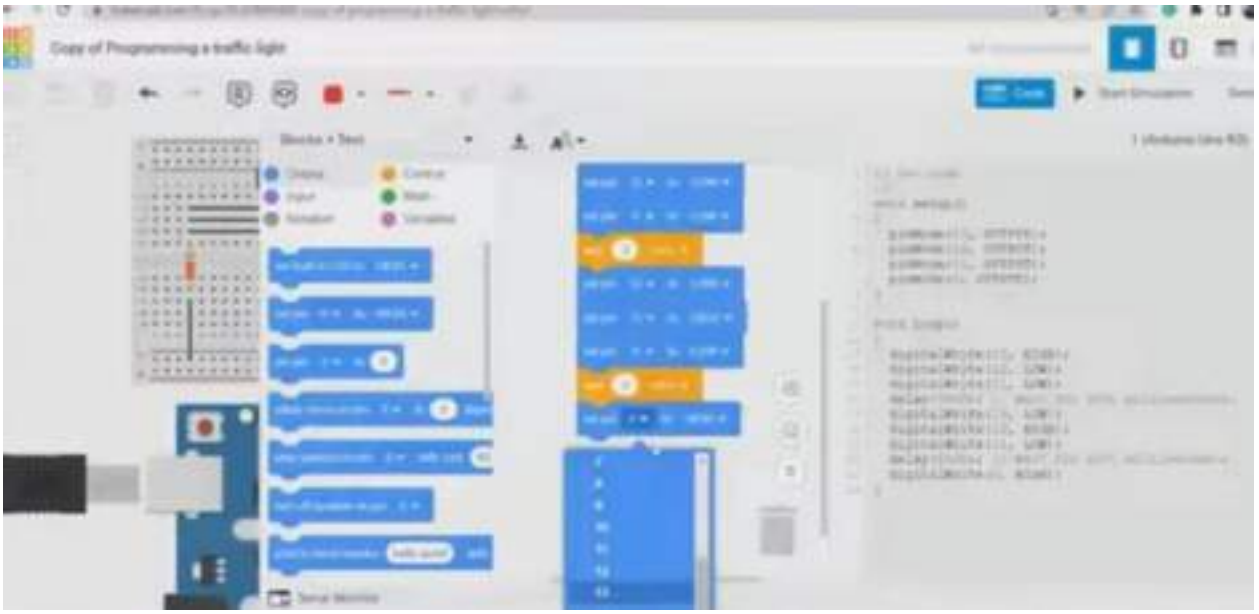
In Totality, this event helped the students a lot.

The Snapshots of the event are enclosed below:


INSTITUTION'S INNOVATION COUNCIL
WHAT IS
PRODUCT
DESIGN


Product design is the process of identifying a market opportunity, clearly defining the problem, developing a proper solution for that problem and validating the solution with real users.


INSTITUTION'S
INNOVATION
COUNCIL
NEED IS OURS
DESIGNED BY OTHERS



Report of the Activity

Title of the Event: Session on How to Plan for Startup and Legal & Ethical Steps
Speaker Name: Mr. Nand Kishore Sharma

Date: 29th November 2022

Total Number of Students Participants: 57

Program Theme: Entrepreneurship/Leadership/Innovation

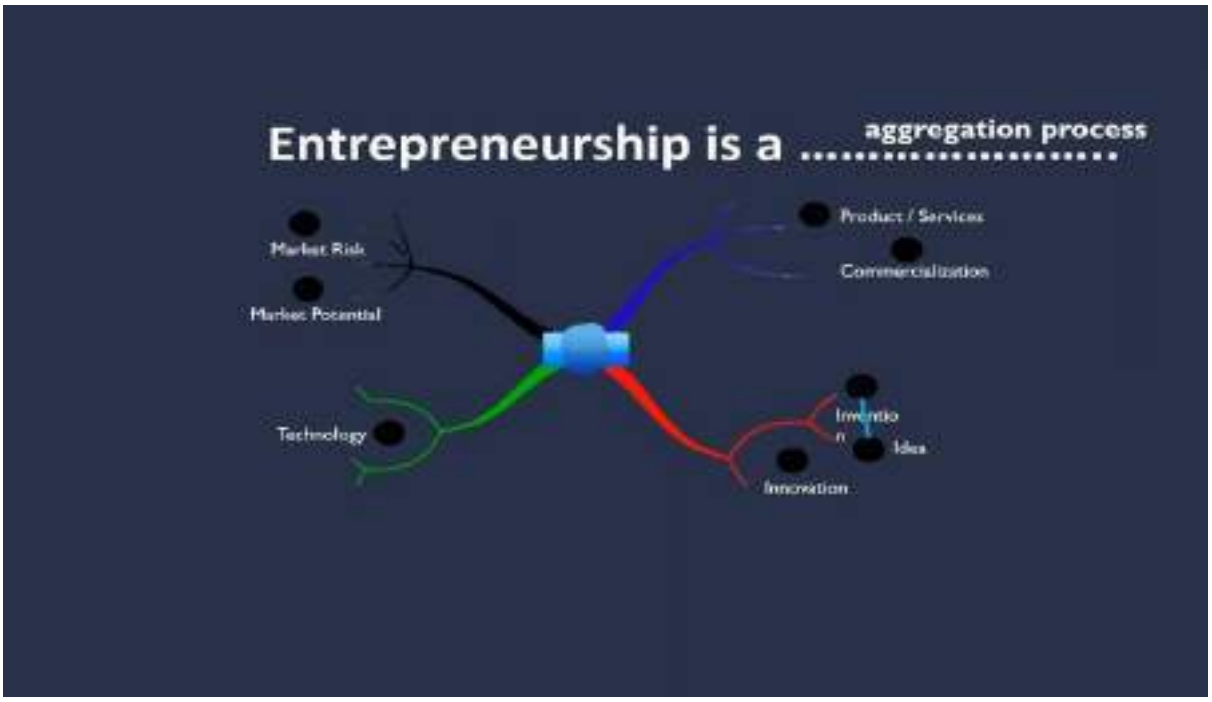
About the Event:

The Event was conducted in the online mode on Google Meet Platform at Pranveer Singh Institute of Technology, Kanpur. The Students Participated with full enthusiasm. The session given by the speaker is designed to provide practical guidance and advice to entrepreneurs at various stages of the start-up process. Also told by the speaker, whether you're just getting started or you've already launched your business, the session can help you develop a plan for success and navigate the legal and ethical challenges that may arise.

During the sessions, the speaker covered a variety of topics, including market research, business planning, branding, funding, and legal and ethical considerations.

In Totality, this event helped the students a lot.

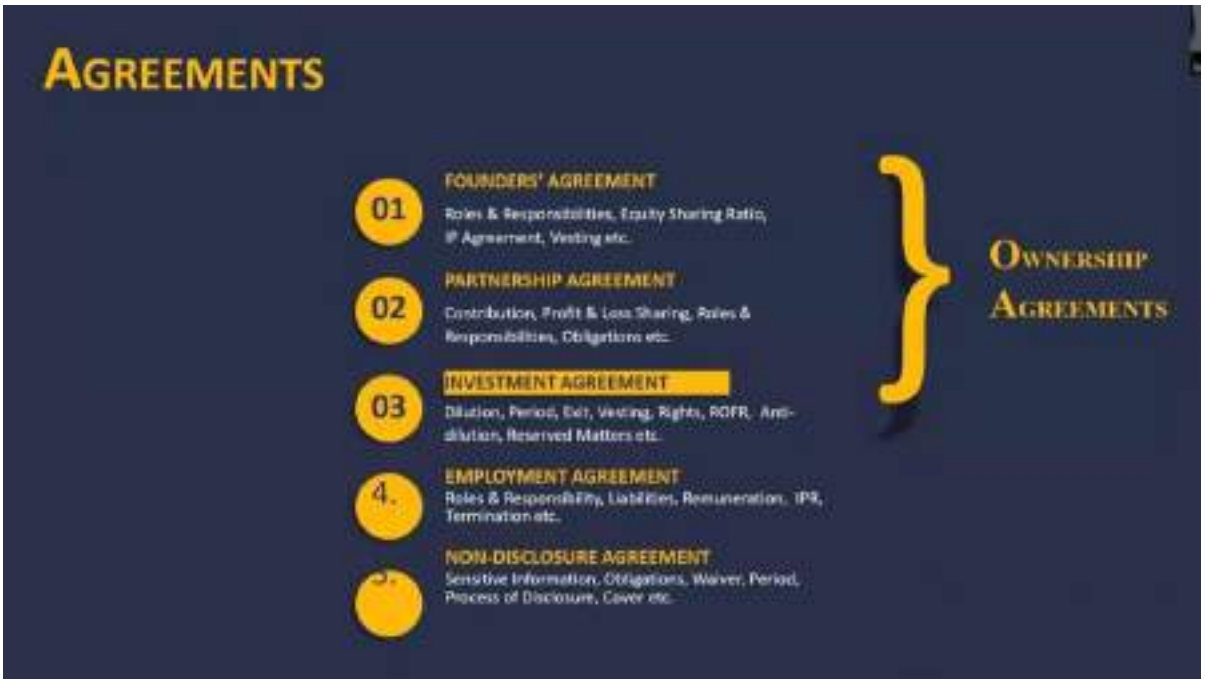
The Snapshots of the event are enclosed below:


Entrepreneurship is a ..... aggregation process
Market Risk
Market Potential
Technology
Product / Services
Commercialization
Innovation
Idea


BUSINESS ENTITIES
01
PROPRIETORSHIP
No registration required, only ONE person is required to start a Sole Proprietorship Firm. Banks may require GSTN for bank accounts.
02
PARTNERSHIP FIRM
Two or more person may start a Partnership firm by executing its chartered documents called Partnership Agreement. Registration is optional.
03
LIMITED LIABILITY PARTNERSHIP
A form of Partnership where liability is limited. Registration is mandatory with the Ministry of Corporate Affairs.
04
COMPANY
OPC or Private Limited Company can be registered with One/Two members, respectively, with Ministry of Corporate Affairs. Pvt. Ltd. is ideal business model for the StartUps.

BUSINESS ENTITIES : COMPARISION

S. No.	Basis	Partnership	LLP	OPC	Private Limited Company
1.	Governing Law	Partnership Act	Limited Liability Partnership Act	Companies Act	Companies Act
2.	Chartered Documents	Partnership Agreement	Partnership Agreement	MoA & AoA	MoA & AoA
3.	Minimum No. of Members Required	Two	Two	One	Two
4.	Minimum No. of Board Members Required	Two	Two	One	Two
5.	Minimum Board Meetings	No Such Requirement	No Such Requirement	Two	Two
6.	Shareholders' Meeting	No Such Requirement	No Such Requirement	No Such Requirement	One


AGREEMENTS
01
FOUNDERS' AGREEMENT
Roles & Responsibilities, Equity Sharing Ratio, IP Agreement, Vesting etc.
02
PARTNERSHIP AGREEMENT
Contribution, Profit & Loss Sharing, Roles & Responsibilities, Obligations etc.
03
INVESTMENT AGREEMENT
Dilution, Period, Exit, Vesting, Rights, ROFR, Anti-dilution, Reserved Matters etc.
4.
EMPLOYMENT AGREEMENT
Roles & Responsibility, Liabilities, Remuneration, IPR, Termination etc.
NON-DISCLOSURE AGREEMENT
Sensitive Information, Obligations, Waiver, Period, Process of Disclosure, Cover etc.
OWNERSHIP AGREEMENTS

Report of the Activity

Theme of The Event: Demo Day/Exhibition/Poster Presentation Ideas/PoC Linkage with Innovation Ambassadors/Experts for Mentorship Support-Manage through YUKTI-NIR.

Date: 30th November 2022.

Total Number of Participants: 127

Program Theme: Entrepreneurship/Leadership/Innovation

About the Event:

The Event was conducted in the offline mode at Pranveer Singh Institute of Technology, Kanpur. The Students Participated with full enthusiasm and the event held in diverse rooms. The students/participants showcased their innovative start up projects and implementations. There were a panel of Judges who evaluated the projects of the students. They categorized them into different grades allowing them to reach a conclusion and participants were rewarded as well.

In Totality, this event helped the students a lot.

The Snapshots of the event are enclosed below:


PSIT

Report of the Activity

Theme of The Event: PPDT- Picture Perception and Detection Test (Entrepreneurship).

Date: 30th November 2022.

Total Number of Students Participants: 53

Program Theme: Entrepreneurship/Leadership/Innovation

About the Event:

The Event was conducted in the offline mode at Pranveer Singh Institute of Technology, Kanpur.

The Students Participated with full enthusiasm and the event was held in diverse rooms. The PPDT is a unique event that tests participants' creativity and storytelling skills based on entrepreneurship. The event presents participants with a hazy, black-and-white picture and challenges them to write a compelling story based on the image. The event is a fun and interactive way to test participants' creativity, imagination, and communication skills based on entrepreneurship. The PPDT event encourages students to think creatively and develop a storytelling mindset, essential skills for entrepreneurs and innovative thinkers.

Overall, this event helped the students a lot.

The Snapshots of the event are enclosed below:


gratis 23
PICTURE PERCEPTION &
DETECTION TEST (PPDT)


WRITING TIME
3:59

Report of the Activity

Theme of The Event: National Pollution Control Day

Date: 2nd December 2022

Program Theme: Air Pollution and Climate Change

About Event:

The Event was conducted at Pranveer Singh Institute of Technology, Kanpur. The Students Participated with full enthusiasm. The Seminar addressed the intricate relationship between air pollution and climate change, emphasizing the significant impact of air pollution, specifically tropospheric ozone, on plant health and agriculture.

Eminent experts shared insights on how air pollution and climate change intersect and can threaten global health, the environment, and food security. The use of remote sensing technology, including satellite imagery, was highlighted for monitoring air pollution. Tropospheric ozone's adverse effects on plant physiology, growth, and crop yields were discussed, with India's high ozone concentrations posing a hidden risk to agricultural regions and farmers.

The Seminar aimed to raise awareness about the interconnected challenges posed by air pollution and climate change and their implications for plant-based ecosystems and food production.

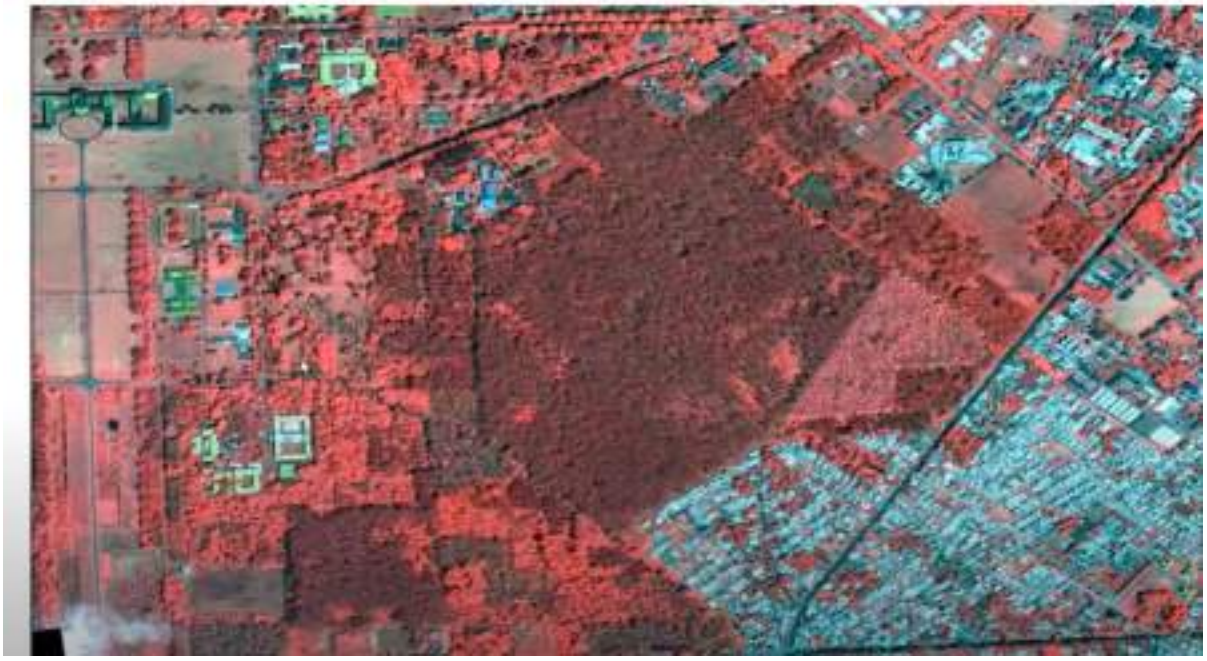
The Main objectives of this session is to-

- **Spread awareness about the damaging effects climate change and air pollution is having on our environment and how we are fighting it.**
- **Also, Encouraging participants to be aware about how they can avoid pollution caused due to industrial processes or human negligence and think innovative solutions for pollution free environment.**
- **Lastly, Raise awareness towards the cause of pollution, and to remind participants about the different ways to reduce pollution.**

Overall, this event helped the students a lot.

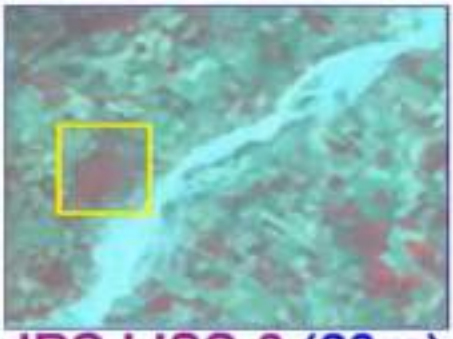
The Snapshots of the event are enclosed below:

IKONOS Image of FRI Plantations, Dehradu

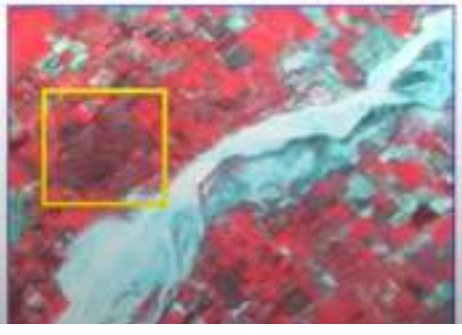


Progress in Imaging Technology....

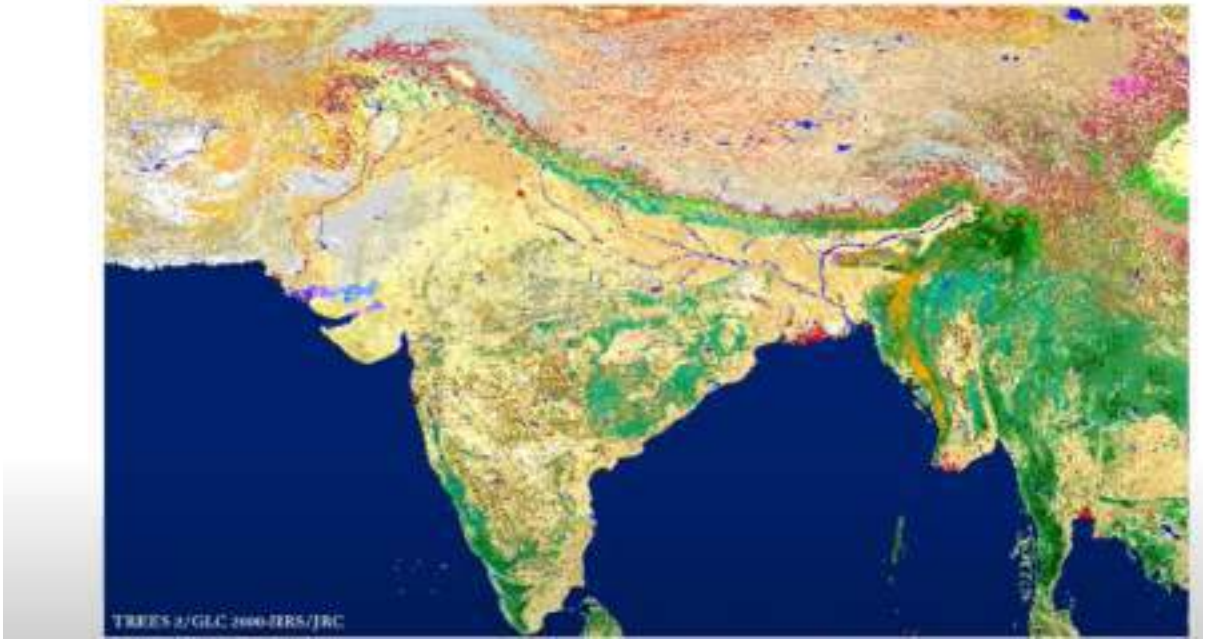
Landsat-TM (30m)



IRS LISS-3 (23m)



Large Area Land Use/Land Cover Monitor



Report of the Activity

Theme of The Event: National Energy Conservation Day

Date: 14th December 2022

Program Theme: Energy Conservation, Technology, Renewable Resources, Innovation.

No of Students Participants: 58

About Event:

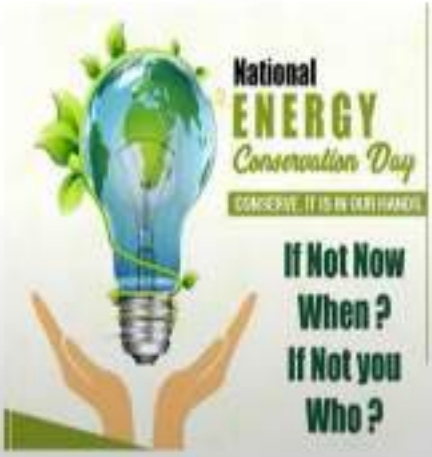
The Event was conducted at Pranveer Singh Institute of Technology, Kanpur. The Students Participated with full enthusiasm.
The Seminar addressed how National Energy Conservation Day, marked annually on December 14th, highlights the importance of energy conservation and raises awareness about climate change. The power sector encompasses generation, transmission, and distribution, with power generation categorized into non-renewable sources like coal, oil, natural gas, and nuclear, and renewable sources including solar, wind, hydro, and geothermal energy. As electricity demand rises, non-renewable resources are depleting, underscoring the urgency of transitioning to renewables.
India is poised for significant shifts, with solar power expected to surpass gas and coal by 2024 and wind power capacity projected to reach 53 GW. Tidal and geothermal energy are explored, though in early developmental stages. Efficient transmission relies on substations, conductors, and insulators. Embracing renewables and mindful energy use are crucial to combat global warming.
Engineers play a vital role in this transformation, staying updated with advancements, while individuals can contribute through actions like adopting solar energy and reducing home consumption. Collective efforts in spreading awareness and taking responsible energy-saving steps are essential to protect the environment.
The Main objective of this session is to spread awareness energy conservation, solar power and shifting our dependency towards renewable sources of energy.

Overall, this event helped the students a lot.

The Snapshots of the event are enclosed below:

14th DECEMBER, NATIONAL ENERGY CONSERVATION DAY

- The Energy Conservation Act was implemented by the Energy Efficiency Bureau (BEE) in 2001.
- The day focuses on making people aware of global warming and climate change and promotes efforts towards saving energy resources.
- Most of the energy sources we use in our daily lives are 'non-renewable' and they can not be reused and renewed. It is said that our energy resources may last only for another 40 years or so.



A. CONVENTIONAL or NON-RENEWABLE ENERGY

I. THERMAL POWER GENERATION

⇒ **India's first Thermal Power Station – Hussain Sagar Thermal Power Station (1929), Hyderabad, Telengana**

⇒ **India's LARGEST Power Plant – Vindhyachal Thermal Power Plant Thermal Power Plant, Singrauli, M.P. under NTPC. Capacity – 4760 MW**

Sources –

1) COAL – 206404.50 MW
2) GAS – 24956.51 MW
3) LIQUED FUELS (DIESEL) – 509.71 MW

* The total power generation in Thermal Power Plants as of 31.01.2021 across India is **71%-75%** of total power generation of India

POWER GENERATION

ADVANTAGE –

1. The efficiency of the energy source is high
2. This energy source is a well-known source
3. The production expenses are low

DISADVANTAGES

1. It is not environmentally friendly
2. When used on a longer run, can deplete soon

Present of Thermal Power Plant in India
New Technology Introduced

- The Central Pollution Control Board (CPCB) has given warnings to shut down plants that are old and whose carbon outflow levels are high.
- To reduce pollution level, plants are designed with modern technique.

a) ***Supercritical coal plants*** - They differ from traditional coal power plants because the water running through it works as a supercritical fluid, meaning it is neither a liquid or a gas.

Advantages-

Coal consumption is 33% lesser

a) ***Ultra-supercritical*** – Introduced in India in 2019 at Khargone, MP by NTPC.

Non-renewable and Renewable Energy

- Non-renewable Resources

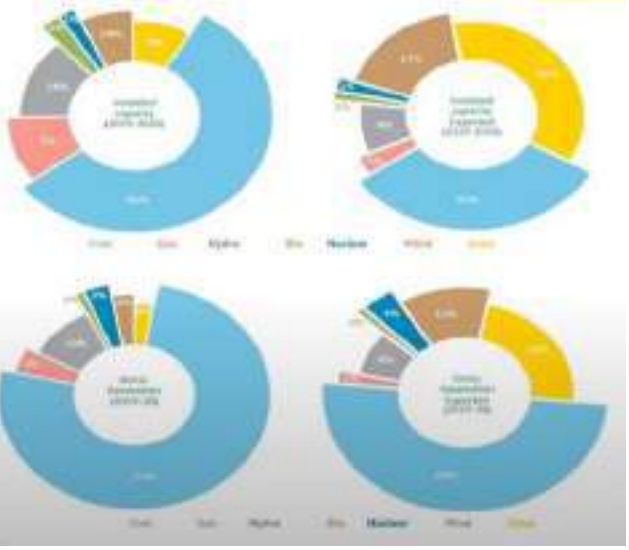
1. Oil
2. Natural Gases
3. Coal
4. Nuclear Energy

- Renewable Energy sources

1. Biomass
2. Hydropower
3. Geothermal
4. Wind
5. Solar

FUTURE OF THERMAL POWER IN INDIA

- CEA (Central Electricity Authority) has estimated that capacity utilization of coal-based thermal power plants will fall to as low as 48 per cent by 2022 as additional non-thermal electricity generation capacities come on stream.
- The COVID-19 pandemic and national lockdown has reduced power demand. coal-fired plants today are running at half their capacity



SOLAR POWER

=> As of 31.01.2021, total the total installed capacity of solar power stood at 38,794 MW (including 34,561 MW of ground-mounted capacity and 4,233 MW of rooftop capacity).

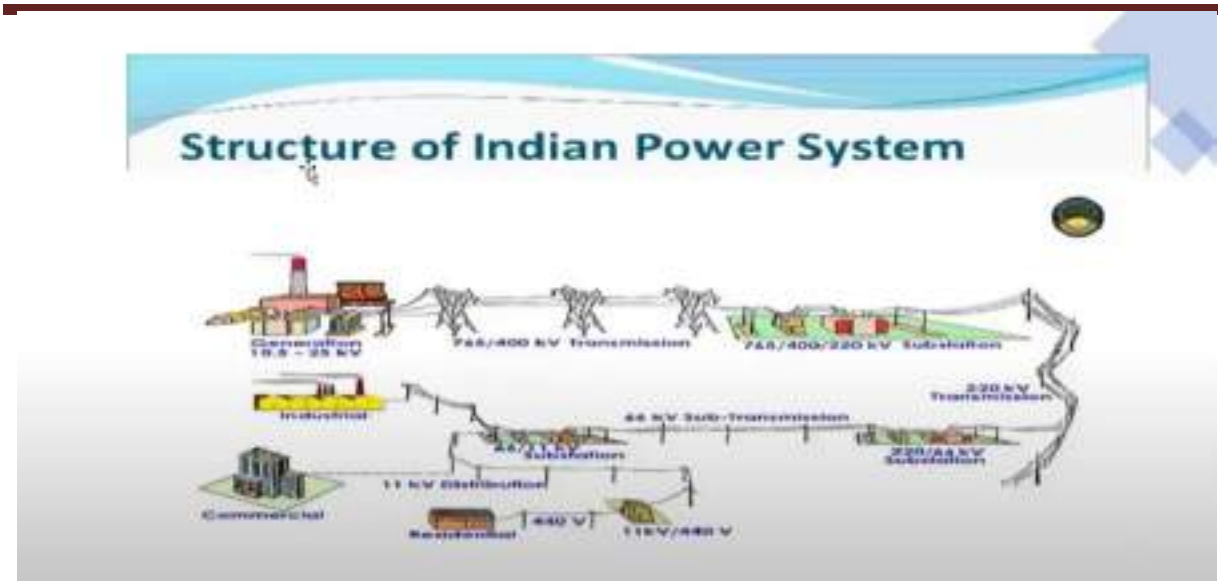
India is entering a "solar powered revolution" that will see it edge out coal as the nation's top electricity source, according to the International Energy Agency (IEA).

Solar power currently makes up just 4% of the nation's power supply, but it is set to grow 18-fold and become the new "king of India's generation fleet" by at least 2040.

India's first Solar Thermal Power Plant in Mount Abu, Rajasthan

Designed to run 24x7 utilizing the concentrated solar power technology

The solar thermal power plant is based on shaftless dish technology and with 210 such dishes to generate 1 MWe (1.5 MWth).


Structure of Indian Power System
Generation
765/400 kV Transmission
765/400/220 kV Substation
Industrial
44 kV Sub-transmission
11 kV Distribution
Commercial
440 V