NEW HORIZON
COLLEGE OF ENGINEERING

Department of Electrical and Electronics Engineering

TEDx Talk

(RECORDED)

12 Predictions for the Future of Technology

- 17 October 2024
- 4:00 PM - 5:00 PM
- Room No: B201
- 3rd Semester A and B sections

Speaker: **Mr. Vinod Khosla**

How to Harness Abundant, Clean Energy for 10 Billion People

- 18 October 2024
- 4:00 PM - 5:00 PM
- Room No: B203
- 5th Semester A and B sections

Speaker: **Mr. Julio Friedmann**

A Faster Way to Get to a Clean Energy Future

- 18 October 2024
- 3:00 PM - 4:00 PM
- Room No: B205
- 7th Semester A and B sections

Speaker: **Mr. Ramez Naam**

Faculty Coordinator:

Ms. Kavitha C H

Senior Assistant Professor, EEE

Convener:

Dr. Sakthivel Aruchamy

HoD - EEE

TEDx TALK
(RECORDED)

NEW HORIZON
COLLEGE OF ENGINEERING

Department of Electrical and Electronic Engineering

V SEMESTER / A & B SECTIONS

How to Harness Abundant, Clean Energy for 10 Billion People

Speaker	Room No. / Faculty Coordinator
Mr. Julio Friedmann	B203 / Prof. Kavitha C H

18 October 2024

4:00 pm - 5:00 pm

NEW HORIZON
COLLEGE OF ENGINEERING

TEDx

How to Harness Abundant, Clean Energy for 10 billion People

- **Julio Friedmann**

Date: 18 October 2024

Venue: B203

Timings: 04:00PM - 05:00 PM

Faculty Coordinator

Mrs. Kavitha C H

-Julio Friedmann

Julio Friedmann is a distinguished expert in energy systems, specializing in carbon management and sustainable energy solutions. With a background in geophysics, Friedmann has held various leadership positions in both governmental and academic institutions, including his role as a Principal Deputy Assistant Secretary for the U.S. Department of Energy. His expertise spans areas like carbon capture, utilization, and storage (CCUS), making him a key figure in advancing technologies that help reduce greenhouse gas emissions.

In addition to his governmental work, Friedmann is a senior research scholar at Columbia University's Center on Global Energy Policy. He is dedicated to finding practical, scalable energy solutions that address the dual challenge of meeting global energy needs while combating climate change. His work emphasizes the importance of innovation, policy action, and international cooperation in building a clean, sustainable future for billions of people.

SUMMARY:

In the TED Talk, Julio Friedmann delves deeper into the challenges of supplying clean energy to a growing population while minimizing environmental impact. He outlines how current energy systems contribute significantly to climate change and argues for the need to reinvent these systems using advanced technologies like carbon capture, utilization, and storage (CCUS).

Friedmann explains how CCUS works by capturing CO_2 from industrial sources and preventing it from entering the atmosphere, either by storing it underground or reusing it in various products. He emphasizes that this technology is critical because it addresses emissions from sectors like cement, steel, and chemicals, which are difficult to decarbonize through renewable energy alone. This makes CCUS essential in the transition to a low-carbon economy.

Here are the key points from Julio Friedmann's TED Talk on harnessing clean energy:

1. **Challenge of Energy for 10 billion People**: As the global population increases, meeting energy demands while combating climate change is crucial.
2. **Carbon Capture, Utilization, and Storage (CCUS)**: CCUS is vital to reducing emissions, especially in industries like steel and cement, which are hard to decarbonize.
3. **Complementing Renewables**: While renewables like wind and solar are important, technologies like CCUS are necessary to fully address carbon emissions.
4. **Global Cooperation**: Friedmann stresses the need for international collaboration, innovation, and investment in clean energy technologies.
5. **Economic and Social Benefits**: Transitioning to clean energy can create jobs, improve infrastructure, and ensure equitable access to energy globally.
6. **Urgency of Action**: Immediate action is needed to implement scalable solutions that balance environmental, economic, and social needs.


TED

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Department of Electrical & Electronics Engineering

ATTENDANCE SHEET

Event: How to Harness Abundant, clean Energy for 10 Billion People

Date: 18/12/2024

S. No.	Name of Participant	Student / Staff	Department	Signature
1	R. Kiran kumar	Student	EEE	
2	Dhananjaya. H	Student	EEE	Dhananjaya. H
3	Adarsh. V	Student	EEE	Adarsh V
4	Dhanesh	Student	EEE	
5	Aishwarya. C. S	Student	EEE	Aishwarya
6	Dhangashree. S	Student	EEE	Dhan
7	Aniket N mirji	Student	EEE	
8	Yathish Kumara D R	Student	EEE	Yathish.
9	Punith kumar. D	Student	EEE	Punithkumar
10	Gowtham Raj. M.S	Student	EEE	
11	BARU TEJESH	Student	EEE	B. Tejesh
12	Dinakara. K. L.	Student	EEE	
13	Aditya narayan Sasmal	Student	EEE	Aditya NS
14	Goutham. K	Student	EEE	Goutham.
	Bhavana. C	Student	EEE	Bhavana.
15	Gowri Manjakumar	Student	EEE	Gowri Manja
16	Iqra Bashir	Student	EEE	Iqra Bashir

Sign. of Coordinator(s) : Ch. Tarik
Name of Coordinator(s): Ch. Tarik

Sign. of Head:
Name of Head:

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	Name of Participant	Student	Department	Signature
17	Shatakshi Pattanaik	Student	EEE	Shatakshi
18	Preety Gupta	Student	EEE	
19	Sakshi S M	Student	EEE	Sakshi
20	Rajhaveni.S	Student	EEE	
21	Rani Gupta P	Student	EEE	
22	YASHASWINI.B.S	Student	EEE	Yashaswini
23	Noor Zoya	Student	EEE	Noor Zoya
24	Reshma Raj K.R	Student	EEE	
25	Tirodaman K.	Student	EEE	
26	Kavyasri K	Student	EEE	
27	Renuka R Ramakrishnan	Student	EEE	
28	Kavin.N	Student	EEE	
29	PREETHAM RAJ.S	Student	EEE	
30	Ayan Kumar V.	Student	EEE	
31	Pradeep J	Student	EEE	
32	Pandian Rajan	Student	EEE	
33	SHREYAS. R. SRINIVAS	Student	EEE	
34	Bindushree	Student	EEE	
35	Sahana Pattar	Student	EEE	
36	Roshan.P	Student	EEE	
37	Shubhashree.M.N	Student	EEE	

Sign. of Coordinator(s) : Ch.V
Name of Coordinator(s): Ch.Kavitha

Sign. of Head:
Name of Head:

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	Name of Participant	Student	Department	Signature
		Student	EEE	
38.	RAJ SINGH	Student	EEE	Raj
39)	Mudavath Vamsi Krishna Naik	Student	EEE	
3)	Nishant Gupta	Student	EEE	
40)	Carthi Narayan	Student	EEE	
41)	Siman	Student	EEE	
42)	T. Purushotham	student	EEE	T. Purushotham
43)	Prajwal MR	Student	EEE	
48)	V. Bhargav	Student	EEE	
45)	~~Gowtham~~ Praveen Kumar	Student	EEE	
46)	Veeresh Doddamani	student	EEE	
47)	Shivam Pandu	Student	EEE	
48)	Roshan A	Student	EEE	
49)	Sushil	Student	EEE	
50)	Mahendra Kumar S	Student	EEE	
51)	Teena Yashas R	Student	EEE	
52)	Mohan Kumar M	Student	EEE	
53)	Y. Sai Pawan	Student	EEE	
54)	Kavyasri K	Student	EEE	
55)	Purvik J. H.	Student	EEE	
56)	Supritha. K	Student	EEE	

Sign. of Coordinator(s) :
Name of Coordinator(s):

Sign. of Head:
Name of Head:

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	Name of Participant	Student	Department	Signature
57)	Bhuvan.R	Student	EEE	
58)	Aditya Prasad	Student	EEE	
59)	Basavaprabhu.K	Student	EEE	
60)	Abhishek.A.Gowda	Student	EEE	
61)	Abhishek R.S	Student	EEE	
62)	Charan D.S	Student	EEE	
63)	Bhasath kumar	Student	EEE	
64)	AASHISH THOMAS OOMMEN	Student	EEE	
65)	CHARAN.KORA	Student	EEE	
66)	G.R.YASHWANTH	Student	EEE	
67)	Abhishek.J	student	EEE	
68)	Deepu.T	Student	EEE	
69)	Chaudhary Manas Ray	Student	EEE	
70)	Thippeswamy	Student	EEE	

Sign. of Coordinator(s) :
Name of Coordinator(s): Ch. Kavitha

Sign. of Head:
Name of Head:

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Department of Electrical & Electronics Engineering
TEDx Talk -Report 2024-25

Sem/Sec	Room Number Faculty Coordinator	Date	Time	Topic	Link
V/A&B	B-203 Prof.Kavitha.C H	18.10.2024	4.00pm-5.00pm	How to Harness Abundant, Clean Energy for 10 Billion People	https://www.youtube.com/watch?v=bwEIqjU2qgk

NAME:	Dhanya Shree S
USN :	1NH22EE040
SEMESTER/SECTION :	V A
SIGNATURE OF STUDENT :	

TEDx Talk Report

As the global population approaches 10 billion by 2050, the demand for energy will increase significantly. Simultaneously, addressing climate change and reducing carbon emissions are critical to ensuring a sustainable future. To meet this dual challenge, we must harness abundant, clean energy.

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NAME:	Bhuvan gowda
USN :	1NH22EE029
SEMESTER/SECTION :	A
SIGNATURE OF STUDENT :	Bgowda.

TEDx Talk Report

We can produce abdundant sustainable & cheap energy. for the world, everyone, says physicist Julio Friedmann. He explores the Infrasture, Innovation & Investment neededto supply energy to 10 Billion people, offering case studies from chiles refurbished supply chain, built in partnership with Japan, to Namibias budding clean hydrogen production, Inviting us to envision a greener, more equaitably powered world
Amazing simplified complex ideas are showed here and recently another constrant in this Video,

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NAME:	Aashish Thomas Oommen.
USN :	1NH22EE001
SEMESTER/SECTION :	5'A'
SIGNATURE OF STUDENT :	Aashish

TEDx Talk Report

The speaker introduces & / starts the talk with current energy problems as well as greenhouse gas emission. He also talks about achieving power for everyone without increasing the amount of harmful gases. He asks how is 60 terawatts of power is distributed to 10 billion people. The speaker expresses the need to use more solar power plants & and shows a few examples of the same including Chile, Kenya and so on. He emphasises on # we need more. The importance of projects coming up in Africa was also mentioned. & Also there is a need for innovation like cheap, reliable and so on. Investment is also important over here which will be really useful for countries like Japan, China. A 100 billion project is coming up in Namibia which will play a huge role. Overall it was a good talk about harnessing energy.