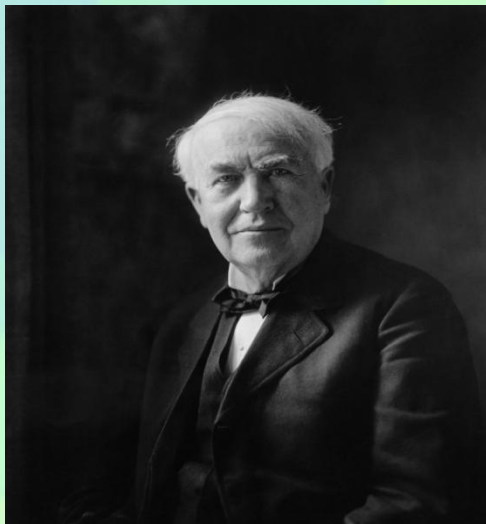


SCIENTIA

2023-24 EVEN SEMESTER NEWSLETTER



ELECTRICAL AND ELECTRONICS ENGINEERING



**Our greatest weakness
lies in giving up. The
most certain way to
succeed is always to try
just one more time**

Let me define a leader

He was the master inventor who turned ideas into reality and darkness into light. With over a thousand patents, he reshaped the modern world through relentless innovation and tireless determination.

-Thomas Alva Edison

Department of Electrical and Electronics Engineering

Vision of the department

To prepare the learners globally competent, dynamic and multi talented young leaders with skill set & knowledge in Electrical and Electronics Engineering field with a focus on higher education, professional practice, research and technical consultancy competence ethical concern.

Mission of the department

- ♦ To prepare the learners professionally deft and intellectually adept in the field of Electrical and Electronics Engineering with an excellent infrastructure, core values and qualified & experienced teaching faculty.
- ♦ To inculcates skill, knowledge and behavior to cater the dynamic requirements in the field of Electrical and Electronics Engineering.
- ♦ To motivate and prepare the learners for career guidance, placements and higher education with a focus on MoUs with premier institutes and industries.

Program Educational Objectives (PEOs)

- ♦ PEO1: Solve challenging technological issues in the field of Electrical and Electronics Engineering for the betterment of the living standards of the society as valuable and productive engineers.
- ♦ PEO2: Improve the efficiency and effectiveness of the existing methodologies by adapting out-of-the-box rationalized thinking.
- ♦ PEO3: Function ethically and communicate professionally as a team member within multidisciplinary teams.
- ♦ PEO4: Continue the process of lifelong learning to cater the dynamically changing requirements in the field of Electrical and Electronics Engineering.

Program Specific Outcomes (PSOs)

- ♦ PSO1: Design and develop innovative projects using the domain knowledge of Control Systems, Power electronics, Electrical Machines, Microprocessors and Microcontrollers.
- ♦ PSO2: Learn the constantly varying technological developments in their problem solving process.

Message

- ♦ Many dreams
- ♦ Many ideas to implement
- ♦ Many thoughts
- ♦ Fear about future

We, SV College of Engineering provide you the platform to go with.

We give wings; let's fly together for the bright future of yours.

Welcome to world of dreams. Let us help you to achieve your dreams.

Have a good stay in the campus.

Message from HOD

It gives me immense pride and satisfaction to pen a few words for this edition of the EEE Department Newsletter. This publication is not just a summary of events, but a celebration of knowledge, creativity, and the enduring spirit of engineering that defines our department.

This newsletter stands as a testimony to the talent, hard work, and perseverance of our students and faculty. It highlights the technical brilliance, research capabilities, achievements, and vibrant culture that we nurture every day. I am particularly pleased to see students engaging in interdisciplinary projects, participating in competitions, publishing papers, and contributing to social initiatives with zeal and responsibility.

As the Head of the Department, I believe that education is not limited to the boundaries of classrooms or laboratories. True learning happens when we explore, question, experiment, and express. This magazine serves as a platform that encourages such exploration and expression.

I extend my sincere appreciation to the editorial board for their dedication in compiling this edition, and to all contributors who have shared their insights, experiences, and creativity. Let us continue striving for academic excellence, technical competence, and values that make a real difference in the world.

With best wishes for continued success and innovation.

Dr. V. Lakshmi Devi

HOD, EEE

Dear Readers,

It is with a deep sense of pride and purpose that we bring to you this edition of the EEE Department Newsletter—a reflection of the ideas, energies, and aspirations that flow through the heart of our academic community.

In today's fast-evolving world, where technology shapes societies and innovation redefine boundaries, Electrical and Electronics Engineering continues to remain a pillar of progress. Within our department, we strive not only to stay aligned with this progress but to contribute to it meaningfully. This newsletter is our humble attempt to showcase that journey.

We would like to express our heartfelt gratitude to our Head of Department for the unwavering support, to our faculty for their guidance, and to our fellow students for their enthusiastic contributions.

A special thanks to our editorial and design team, who worked tirelessly behind the scenes. As you turn each page, we hope you are encouraged to reflect, to innovate, and to dream. This newsletter belongs to all of us—and it stands as a symbol of our shared growth, resilience, and potential.

Editorial Board

G.Bindu Sri (IV EEE), G.Poojitha (IV EEE)

Faculty advisor

Dr. J.A. Baskar, Professor, Dept. of EEE

Result Analysis

IV-I Results [2020-24 Batch]

Number of Students Registered	139
Number of Students cleared all Subjects	138
Pass Percentage	99.28%

S.No.	Roll Number	Name of the Student	Percentage
1	20BF1A0217	CHITTULURI BINDU SREE	100
2	20BF1A0225	GANTA POOJITHA	100
3	20BF1A02C3	YEDOTI SREE DEEPTHI	100
4	21BF5A0213	NARREDDY BHAVANA	100
5	20BF1A0234	K PAVITHRA	99.5

III-I Results [2021-25 Batch]

Number of Students Registered	135
Number of Students cleared all Subjects	92
Pass Percentage	68.14%

S.No.	Roll Number	Name of the Student	Percentage
1	22BF5A0244	TALLAPUREDDY SWETHA	90.49
2	22BF5A0218	GABBI HIMA BINDU	89.71
3	22BF5A0233	MULE SIVA CHANDRIKA	87.94
4	22BF5A0247	THUMMALURU SHASI VARDHAN REDDY	87.84
5	22BF5A0235	NANABALA KUMAR RAJA	87.45

II-I Results [2022-26 Batch]

Number of Students Registered	190
Number of Students cleared all Subjects	280
Pass Percentage	67.85%

S.No.	Roll Number	Name of the Student	Percentage
1	23BFA02L39	PAIYYAVULA MANOJ	92.60
2	23BFA02L04	APPAIAHGARI DHANUSH	91.73
3	23BFA02L06	BADURU CHURNIKA	91.73
4	23BFA02L65	VARA PAVAN KALYAN	91.44
5	23BFA02L14	DWARSALA SWETHA REDDY	89.90



Journal Publications A.Y 2023-2024

S. No	Name of the faculty	Title of the paper	Name of the Journal / Publisher	Month & Year
1	Dr. Kumar K Dr. V Lakshmi Devi	Fuel Cell Fed Electrical Vehicle Performance Analysis with Enriched Switched Parameter Cuk Converter	Recent Advances in Electrical & Electronic Engineering	03-07-2023
2	Dr. Y V Krishna Reddy	Grey Wolf Optimizer algorithm for multi-objective optimal power low	Journal of Intelligent Systems and Internet of things	14-02-2024
3	Dr. Y V Krishna Reddy	Investigation of equilibrium optimizer to solve economic dispatch with practical constrains	Balkan Journal of Electrical and Computer Engineering	March 2024
4	Dr. Y V Krishna Reddy	Economic Load Dispatch with Practical Constraints using Mountaineering Team-Based Optimization Technique	International Journal of Intelligent Systems and Applications in Engineering	03-09-2023
5	Mrs. K. Prathibha, Mr. Nanda Kumar Enjeti	A Deep Learning and Optimization-Aided Intrusion Detection Framework for Adaptive Threat Detection in Dynamic Public Cloud Environments	International Journal of Intelligent Systems and Applications in Engineering (IJISAE)	Jun-24
13	P Suneetha	Power Quality conditioning using Two-level buck inverter based D-STATCOM	International Journal of Applied Power Engineering (IJAPE)	Jun 2024
14	K Sudhher, P Suresh, R Sireesha and K Yamuna	COVID-19 Propagation Unified Controller for Improved Power Quality in Multi Feeder Renewable Integrated System	PrzeglądEleektrotec hniczny	22-06-2024

Book Publications 2023-2024

S. No.	Author	Title of the Book	Publisher	Year of Publication
1	Dr. V Lakshmi Devi Dr. Kumar K	Battery Energy Storage Technologies in Electric Vechiles: An Overview and Perspective on the Future	Futuristic Trends in Electrical Engineering	May-24
2	Dr. Kumar K Dr. V Lakshmi Devi	A Review: Issues and Challenges of Electric Vehicle Energy Storage Systems	Futuristic Trends in Electrical Engineering	May-24
3	Dr. Shaik Rafi Kiran Dr. JA Baskar	Electromagnetics for Electrical Machines	Infinite Research	08-04-2024
4	Dr. Shaik Rafi Kiran Dr. YV Krishna Reddy	ChatGPT: Comprehensive Study on Generative AI Tool	Infinite Research	Feb 2024
5	Dr. Kumar K Dr.V Lakshmi Devi	The Art of CAN Protocol Design - Strategies and Practices	Notion Press	Mar 2024

Conference Publications A.Y 2023-2024

S.No	Name of the faculty	Title of the paper	Name of the conference publisher	Month & Year
1	Raju Kuruva	Wavelet Transform based Statistical Feature Extraction of Power Quality Disturbances	AIP Publishing	12-09-2023
2	Dr. Kumar K Dr. V Lakshmi Devi M.Jyothsnadevi Dr. JA Baskar	Performance Analysis of PV System with DC-DC Converter under Different Solar Irradiations Conditions.	2023 Second International Conference on Trends in Electrical, Electronics, and Computer Engineering (TEECCON), REVA UNIVERSITY, Bengaluru.	23-Aug-23
3	Dr. V Lakshmi Devi Dr. Kumar K Dr. Shail Rafi Kiran NM Girish Kumar	Analysis of Energy Management System in Micro Grid Operations, Load Support, and Control Hierarchy	2023 Second International Conference on Trends in Electrical, Electronics, and Computer Engineering (TEECCON)	23-24 AUGUST 2023
4	Dr. Shaik Rafi Kiran	Performance Analysis of Satellite Image Classification Using Deep Learning Neural Network	ICSISCET 2022 proceedings (International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology)	24-09-2023

Patent Publications/Grants A.Y 2023-2024

S. No	Name of the Faculty	Title	Status	Date
1	Dr. Shaik Rafi Kiran	Adaptive Solar-Photovoltaic and Battery Management System for Autonomous Vehicle Operations	Published	22-12-2023
2	Dr. Shaik Rafi Kiran	Enhanced Energy Density Lithium Ion Batteries Using Nanostructured Electrode Materials	Published	27-12-2023
3	Dr. Shaik Rafi Kiran	Nano-Enhanced PCM Formulations for Rapid Charge/Discharge in EV Thermal Energy Storage Systems	Published	05-01-2024
4	Dr. Kumar K Dr. V Lakshmi Devi NM Girish Kumar K Raju P Suneetha K Roopa Raj Y Hari Krishna	Auto Rickshaw with LED advertising board powered by solar panels	Granted	10-01-2024
5	Dr. Shaik Rafi Kiran	UK Design Patent_: Sleek and Stylish Electric Scooter	Granted	12-01-2024
6	Dr. Kumar K Dr. V Lakshmi Devi Dr. A Sudhakar	Dynamic QR-Based Billing System for Contactless and Secure In-store	Published	08-03-2024
7	Dr. Shaik Rafi Kiran Dr. K Sudheer Dr. YV Krishna Reddy Dr. JA Baskar B Sreenivas Reddy Nanda Kumar E G Dilli Babu	EV Battery Management System Enhanced by Solar Powered Fuzzy Logic	Published	08-03-2024
8	Dr. Kumar K Dr. V Lakshmi Devi C Keerthi P Venkata Varaprasad	AI Driven Smart Electric Wheel Chair	Published	22-03-2024
9	Dr. Shaik Rafi Kiran	Neural network-assisted diagnosis of electrical junction anomalies in EVs	Published	19-04-2024
10	Dr. Shaik Rafi Kiran	Solar Powered Engine Cooling System for Electric Cars	Granted	17-05-2024
11	P Vinod Kumar Dr. P Suresh Dr. R Sireesh Dr. YV Krishna Reddy Dr. K Sudheer	Swift frame for electric bicycle	Granted	10-06-2024

FACULTY R&D PROPOSALS 2023-2024

S. No	Name of the faculty	Project Title	Project Type	Funding Agency	Amount (Rs.)	Date
1	Dr. V Lakshmi Devi Dr. Kumar K	An Intelligent Battery Energy Management System for Fuel Cell fed Electric Vehicle Application	Research	TiHAN- IIT Hyderabad	Rs. 19,01,356/-	27-06-2023
2	Dr. V Lakshmi Devi Dr. Kumar K	Five Day Faculty Development Program on Hybrid Electric Vehicle's Battery Management System- Research Challenges & Opportunities	FDP	JNTUA	Rs. 2,09,000/-	23-09-2023
3	Dr. Shaik Rafi Kiran Dr. YV Krishna Reddy	Seminar on Electric Vehicles: Battery Technologies, Charging Strategies, and Charging Station Placement	Seminar	SERB	Rs. 2,20,000/-	30-08-2023
4	Dr. K. Kumar	Electric Cycle	Research Project	Council for Social Development	Rs. 1,00,000/-	26-07-2023
5	Dr. J.A. Baskar	Integration Of Renewable Energy Sources to Wireless Charger of Electric Vehicle	Research Project	Council for Social Development	Rs. 1,00,000/-	26-07-2023
6	Dr. Kumar K Dr. V Lakshmi Devi	Workshop on Hybrid Electric Vehicle's Battery Management System Using Heuristic Techniques- Challenges & Opportunities	Workshop	SERB	Rs. 2,25,000/-	13-07-2023

PLACEMENTS

EEE -2023-24			
S.No	Name of the student Placed	Enrollment no.	Name of the Employer
1	BADURU RAMYA	19BF1A0212	Accenture
2	ETHAMAKULA THANUJA	19BF1A0240	Accenture
3	P POOJITHA	19BF1A02A7	Accenture
4	SARLA SUPRAJA	19BF1A02D2	Accenture

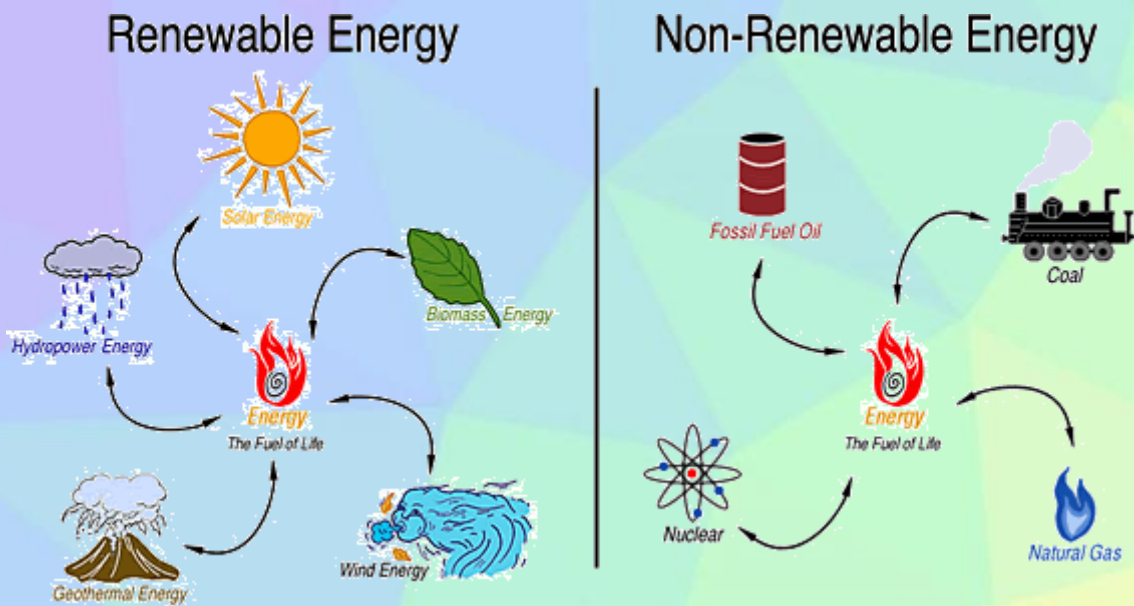
5	AVULA MADHAN MOHAN REDDY	19BF1A0208	Acmegrade's
6	K MAHESH CHOUDHARY	19BF1A0256	Acmegrade's
7	KYABARSI THANUJA	19BF1A0279	Acmegrade's
8	M B S VIKRANTH	19BF1A0280	Acmegrade's
9	PALLURU ANUSHA	19BF1A02B3	Acmegrade's
10	SHARAF BHARADWAJ	19BF1A02D9	Acmegrade's
11	NELLORE MADHURIMA	20BF5A0211	Acmegrade's
12	SHAIK MANSOOR BASHA	20BF5A0215	Acmegrade's
13	THOTA THARUN RAJ	20BF5A0218	Acmegrade's
14	VEMPALLI SPANDANA	20BF5A0222	Acmegrade's
15	MURAGA REDDY GARI KEERTHI	19BF1A0299	Acmegrade's
16	N SAI KIRAN	19BF1A02A2	Acmegrade's
17	NATHURAM SRI KISHAN	19BF1A02A5	Acmegrade's
18	P PRAVEEN KUMAR	19BF1A02A8	Acmegrade's
19	PACHIGARI JEEVAN KUMAR REDDY	19BF1A02B1	Acmegrade's
2021	PAMUGALLA VIDYA CHARAN	19BF1A02B4	Acmegrade's
22	PARAGONDA NAVEEN	19BF1A02B6	Acmegrade's
23	PEDDIREDDY RISHITH BRAHMA REDDY	19BF1A02B8	Acmegrade's
24	KONDREDDI OBULA REDDY	20BF5A0207	Boson Motors
25	TIRUMALSETTY PARDHASARADHI	20BF5A0219	Boson Motors
26	YASARAPU SIVA	20BF5A0223	Boson Motors
27	A JYOTHEESWAR REDDY	19BF1A0201	City Union Bank
28	B VISHNU SAI	19BF1A0210	City Union Bank
29	BOLLAVARAM HARI CHANDRIKA	19BF1A0221	City Union Bank
30	CHILLAKURU LOHITHA REDDY	19BF1A0230	City Union Bank
31	D MADHU SUDHAN	19BF1A0231	City Union Bank
32	ERIKE SREENATH YADAV	19BF1A0239	City Union Bank

33	J RAJESH	19BF1A0252	City Union Bank
34	JINKA SIVA SAI	19BF1A0253	City Union Bank
35	KUKKARACHAPALLE BINDHU	19BF1A0277	City Union Bank
36	MIRIYALA SATHISH	19BF1A0294	City Union Bank
37	MUDDAM GANESH REDDY	19BF1A0296	City Union Bank
38	RACHAGORLA VENKATA RAMANA	19BF1A02C5	City Union Bank
39	TELLAMEKALA ANIL KUMAR	19BF1A02E8	City Union Bank
40	VALLURU YAMINI	19BF1A02F7	City Union Bank
41	VANKARAJU ASWINI	19BF1A02F8	City Union Bank
42	C SRIYA	19BF1A0226	CSS CROP
43	KOTERU MANJULATHA	19BF1A0276	Focus Edamatics
44	KURUVA NARENDRA BHUPATHI	19BF1A0278	Focus Edamatics
45	MALLANGI SUPRIYA	19BF1A0286	Focus Edamatics
46	PANDIKUNTA HARI PRASAD	19BF1A02B5	Focus Edamatics
47	PARINGICHETTY GOWTHAMI	19BF1A02B7	Focus Edamatics
48	PRODDATUR GUNASEKHAR	19BF1A02C2	Focus Edamatics
49	PULICHERLA YASHWANTH KUMAR	19BF1A02C4	Focus Edamatics
50	RAPOORU DEVI PRIYA	19BF1A02C6	Focus Edamatics

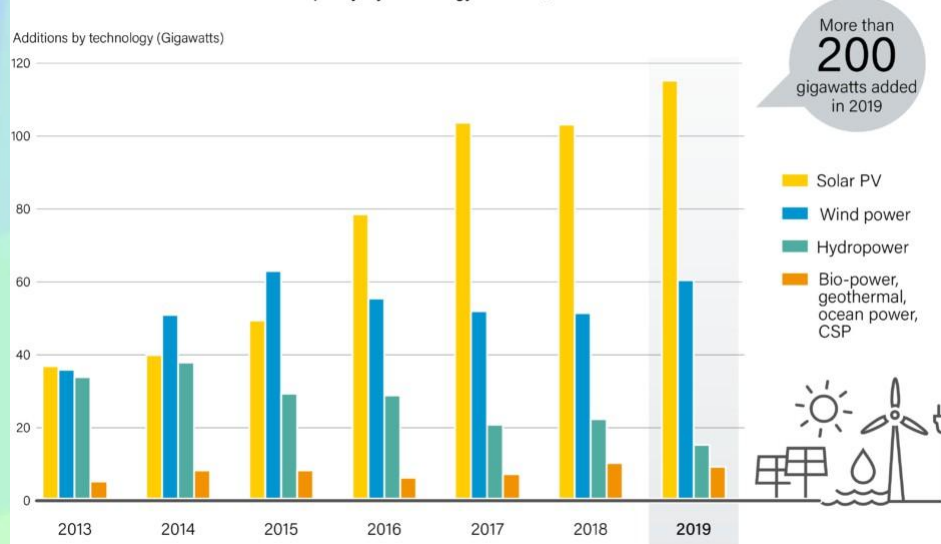
Student Participations

2023-24					
S.No	Name of the student	Event	Organized by	Date	Participation
1	K.Likhitha	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference (CRATE-2024)
2	K.Nitya	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering(CRATE-2024
3	Lohitha Nambi	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering(CRATE-2024
4	M.Dinesh	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
5	M.Madhu	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
6	A. Esha Sanjana	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
7	K. Venkata Sai	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
8	N.Deepika	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
9	M. Sravan	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
10	Shaik Afsana Mehathaj	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
11	K.Likhitha	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering
12	K.Nitya	CRATE-2024	VEMU Institute of Technology (Autonomous)	26-27 April 2024	Presented paper in 4th National Virtual conference on Recent Advances in Technology & Engineering

Renewable Energy



Annual Additions of Renewable Power Capacity, by Technology and Total, 2013-2019



Renewable energy is energy derived from natural resources that replenish themselves in less than a human lifetime without depleting the planet's resources. These resources – such as sunlight, wind, rain, tides, waves, biomass and thermal energy stored in the earth's crust – are available in one form or another nearly everywhere. They are virtually inexhaustible. And, what is even more important, they cause little climate or environmental damage.

Fossil fuels such as oil, coal, and natural gas on the contrary are available in finite quantities only. As we keep extracting them, they will run out sooner or later. Although produced in natural processes, fossil fuels do not replenish as quickly as we humans use them.

Key benefits of renewable energy for people and the planet

Renewable energy emits no or low greenhouse gases. That's good for the climate.

Renewable energy emits no or low air pollutants. That's better for our health.

Renewable energy comes with low costs. That's good for keeping energy prices at affordable levels.

Renewable energy makes the energy system resilient. That's important to prevent power shortages.

Renewable energy is accessible to all. That's good for development.

Renewable energy is secure. That's good for stability.

Save Fuel: Save Energy-Editorial Board