

VOL. 4, NO. 1  
ISSN 2581-5849  
INDEXED WITH J-GATE

# PDPU JOURNAL OF **ENERGY AND MANAGEMENT**

**ROLE OF CORPORATE GOOD GOVERNANCE IN ACHIEVING  
ENVIRONMENTAL SUSTAINABILITY TOWARDS FULFILLING SDG  
AGENDA-2030**

*H. K. Patnaik*

**A STUDY ON IMPLEMENTATION OF 'SMART GRID' TECHNOLOGY IN  
INDIAN POWER SECTOR**

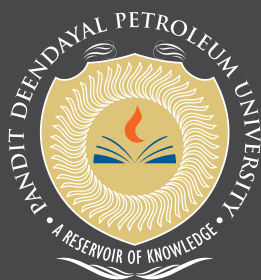
*Mrugesh Pawar*

**LEARNING AND FORGETTING IN INDUSTRIAL SYSTEMS**

*Vivek Pathak & Ashutosh Muduli*

**HOUSING POLICIES: COMMON GOALS AND DIVERSE APPROACHES TO  
SOCIAL HOUSING IN INDIA AND OTHER COUNTRIES**

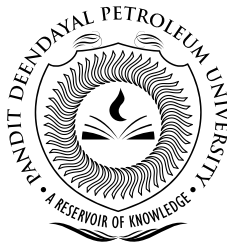
*Madhu Bharti & Sriram Divi*



# PDPU

**PANDIT DEENDAYAL PETROLEUM UNIVERSITY**

Gandhinagar, Gujarat, India



## **PDPU JOURNAL OF ENERGY AND MANAGEMENT**

UGC APPROVED JOURNAL: NO. 63922

### **CHIEF PATRON:**

- Shri D. Rajagopalan, IAS, (Retd.),  
Chairman, Standing Council,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat

### **CHIEF EDITOR:**

- Dr. C. Gopalkrishnan,  
Director General,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat

### **MANAGING EDITOR:**

- Dr. Ashutosh Muduli,  
Professor,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat

### **INTERNATIONAL EDITOR:**

- Devendra Kodwani, Ph.D.,  
Professor, Executive Dean,  
Faculty of Business and Law & Head of  
Business School, The Open University,  
Michael Young Building, Walton Hall,  
Milton Keynes, MK7 6AA, UK

### **EDITORS:**

- Dr. Anirbid Sircar, Professor,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat
- Dr. Indrajit Mukhopadhyay, Professor,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat
- Dr. Surendra Singh Kachhwaha,  
Associate Professor,  
Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat

### **EDITORIAL ADVISORY BOARD:**

- Professor Zhanna Belyaeva, Graduate School of Economics and  
Management Ural Federal University, EMBRI Country Director, Russia
- Professor Timothy C. Coburn, Director, School of Energy Economics,  
Policy and Commerce, The University of Tulsa, USA
- Professor Peter Stokes, Vice-President: Business Relations and  
SFEMRBI, University of Chester, UK
- Professor Rupendra Paliwal, Vice President for Strategic Planning,  
Sacred Heart University, USA
- Professor Shivakumar Karekal, University of Wollongong,  
NSW 2522, Australia
- Professor Abhishekh, Indian Institute of Management,  
Ahmedabad, India
- Professor Andrew Dutta, Management Development Institute,  
Gurgaon, India
- Professor Rajeev Shekhar, Dept. of Material Science and Engg.,  
Indian Institute of Technology, Kanpur, India
- Professor R.K. Pandey, Dept. of Electrical Engg., Institute of  
Technology, BHU, India
- Professor Santanu Bandyopadhyay, Dept. of Energy Systems and  
Engineering, Indian Institute of Technology, Mumbai, India.
- Professor Laltu Chandra, Dept. of Mechanical Engg., Indian Institute  
of Technology, Jodhpur, India
- Professor Ranjan Sengupta, Head of Department of Chemical Engg.,  
Baroda University, India
- Professor VP Sharma, Head of the Department of Petroleum  
Engineering, Indian School of Mines, Dhanbad, India
- Professor Pramod Paliwal, Dean, School of Petroleum Management,  
Pandit Deendayal Petroleum University, Gandhinagar, Gujarat
- Professor D.M Pestonjee, Former Professor, Indian Institute of  
Management, Ahmedabad, India

### **EDITORIAL AND ADMINISTRATIVE SUPPORT:**

- Ms. Susmita Ghosh, Ph.D. Scholar

***PDPU Journal of Energy and Management (JEM)*** is an International referred peer-reviewed journal. PDPU Journal of Energy and Management welcomes original papers from both academicians and practitioners on experimental energy science and technology (conventional and non-conventional), energy sector related management, business, and organizational issues related to energy and research. Papers, based on theoretical or empirical research or experience, should illustrate the practical applicability and/or policy implications of work described.

The bi-annual journal carries many features including perspectives, conceptual research, empirical research, colloquium, management case, and book reviews. Authors are invited to submit their contribution under any feature.

#### **AIM AND SCOPE**

The proposed research journal shall report and focus on identifying new opportunities, challenges, best practices and strategies for global economy on various complementing issues like business & techno-managerial Issues, regulatory & policy matters, marketing issues, financial & accounting issues, operational excellence & management, social & human resource management and capacity building in general and energy sector in specific.

PDPU JEM is a peer reviewed journal and follows a 'double blind' review process. All the papers submitted to PDPU JEM go through a preliminary review at the editorial desk and those considered appropriate are sent to an Editor representing a specialized domain. On recommendation of the concerned Editor, the Article may be rejected or assigned to two reviewers.

#### **PUBLICATION INFORMATION**

PDPU JEM shall be published biannually. All editorial correspondence should be addressed to the Chief Editor, C. Gopalkrishnan, School of Petroleum Management, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat - 382007 or sent by mail to *jem.pdpu@pdpu.ac.in* or *jem.pdpu@gmail.com*.

The views expressed in the Articles are those of the respective authors. Neither PDPU JEM nor Pandit Deendayal Petroleum University, Gandhinagar, Gujarat can accept any responsibility for any in advertent omissions.

#### **CONTACT DETAILS:**

**Dr. Ashutosh Muduli, Managing Editor**

School of Petroleum Management,  
Pandit Deendayal Petroleum University  
Gandhinagar, Gujarat - 382007, India.

E-mail: [jem.pdpu@pdpu.ac.in](mailto:jem.pdpu@pdpu.ac.in)  
[jem.pdpu@gmail.com](mailto:jem.pdpu@gmail.com)

#### **PUBLISHER'S DETAILS:**

Pandit Deendayal Petroleum University,  
Gandhinagar, Gujarat - 382007, India.

Telephone: +91 79-23275101

E-mail: [jem.pdpu@pdpu.ac.in](mailto:jem.pdpu@pdpu.ac.in)  
[jem.pdpu@gmail.com](mailto:jem.pdpu@gmail.com)

Website: <https://www.pdpu.ac.in>

PDPU JOURNAL OF  
**ENERGY AND  
MANAGEMENT**

---

VOL. 4. NO. 1  
INDEXED WITH J-GATE

## CONTENT

<b>EDITORIAL</b>	<b>9</b>
Professor C. Gopalkrishnan, Chief Editor	
<b>1. ROLE OF CORPORATE GOOD GOVERNANCE IN ACHIEVING ENVIRONMENTAL SUSTAINABILITY TOWARDS FULFILLING SDG AGENDA-2030</b>	<b>11</b>
H. K. Patnaik	
<b>2. A STUDY ON IMPLEMENTATION OF 'SMART GRID' TECHNOLOGY IN INDIAN POWER SECTOR</b>	<b>21</b>
Mrugesh Pawar	
<b>3. LEARNING AND FORGETTING IN INDUSTRIAL SYSTEMS</b>	<b>31</b>
Vivek Pathak & Ashutosh Muduli	
<b>4. HOUSING POLICIES: COMMON GOALS AND DIVERSE APPROACHES TO SOCIAL HOUSING IN INDIA AND OTHER COUNTRIES</b>	<b>41</b>
Madhu Bharti & Sriram Divi	

## **EDITORIAL**

We are pleased to present to you the VII th edition of PDPJ Journal of Energy and Management. The following are the highlights of the papers presented in the journal.

The first paper on role of corporate good governance in achieving environmental sustainability towards fulfilling SDG Agenda-2030 by Dr. H. K. Patnaik focused on the environmental sustainability and its linkage to innovative approach and good corporate governance practices for achieving SDG agenda -2030. Examples and strategies from different corporate sectors are provided to help corporates to plan, implement, monitor, review and improve the business strategy good governance characteristics that include but not be limited to accountability, transparency, rule of law, responsiveness, equity and inclusiveness, effectiveness and efficiency as well as intense participation.

The second paper Mr. Mrugesh Pawar explored the reasons for decaying of Indian power distribution sector and provided solution through 'smart grid' technology. Largely from the horse mouth, the paper captures several vital information and data about all the 'Smart Grid' programs in India as well as abroad; and have observed several implementation issues. For example, increased involvement of Politicians, Bureaucrats, Policy Makers, Regulators, Big Consulting Companies, MNCs, Local Big IT and Power Companies, Small Group of Contractors etc. has killed the basic objectives of smart grid implementation. Further, DPR are being prepared and the costing of the projects are suspiciously being prepared by some select consulting groups who have made a close internal link (between politicians, Bureaucrats, Chief Officers/ Executives of Electricity Companies, and some select suppliers/vendors).

The third paper on learning and forgetting in industrial systems by Mr. Vivek Pathak provides an overview of the antecedents and consequences of Human Interface while learning and forgetting in Industrial systems. Different case studies are presented and analyzed leading to an understanding through inter linkages of Human interfaces during an important safety practice of permit to work system in different organizational context. Findings from a series of case studies from previous experiences are reviewed and de-constructed in order to understand the potential impact of such adventurism. Various derivative inter-linkages also lead to an examination of organizational culture, leadership role and human behavior. This study reveals the intricacy involved in such complex involvements and confused outcomes by learning and then forgetting thereby proving their contribution as potential causes leading to an incident or accident in future.

Finally, Madhu Bharti focused on infrastructure sector, specifically, housing sector and emphasized on different approaches to a common goal and identify possible interventions. The secondary data based paper found that rapid urbanization has lead to housing shortage in the developing countries. In India the responsibility of mitigating the 18 million housing shortage lies with the state governments. Access to quality shelter is still a big challenge before the nation and requires immediate actions. Many successful and some not so successful approaches have been tried in India. As housing lies in the domain of state governments in India, each state has come up with its own solutions. Similarly many countries have tried approaches relevant in their context.

*C. Gopalkrishnan, Director General  
Chief Editor*