



# IP and Green Growth

## The role of IPRs in Global Challenges

IP Collegium Meeting

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# What is Green Technology?

- Environmental friendly or clean technology
  - Recycling
  - Environmental remediation
  - Alternative fuels
  - Cradle to Cradle
  - Green building
  - Green nano technology



# WHY Green Technology?

- Globalization and urbanization
- Limited resources of non renewable
- Global climate change
- Impact on environment

# What TRIPS says?

- **Article 7**
- *"The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the **mutual advantage of producers and users** of technological knowledge and in a manner conducive to **social and economic welfare**, and to a balance of rights and obligations."*

# How world is reacting?

- Offering special treatment or accelerated examination of Green Technology Innovation by Patent Office
  - Japan
  - USA
  - UK
  - Australia
  - Brazil
  - Canada
  - Israel
  - Republic of Korea

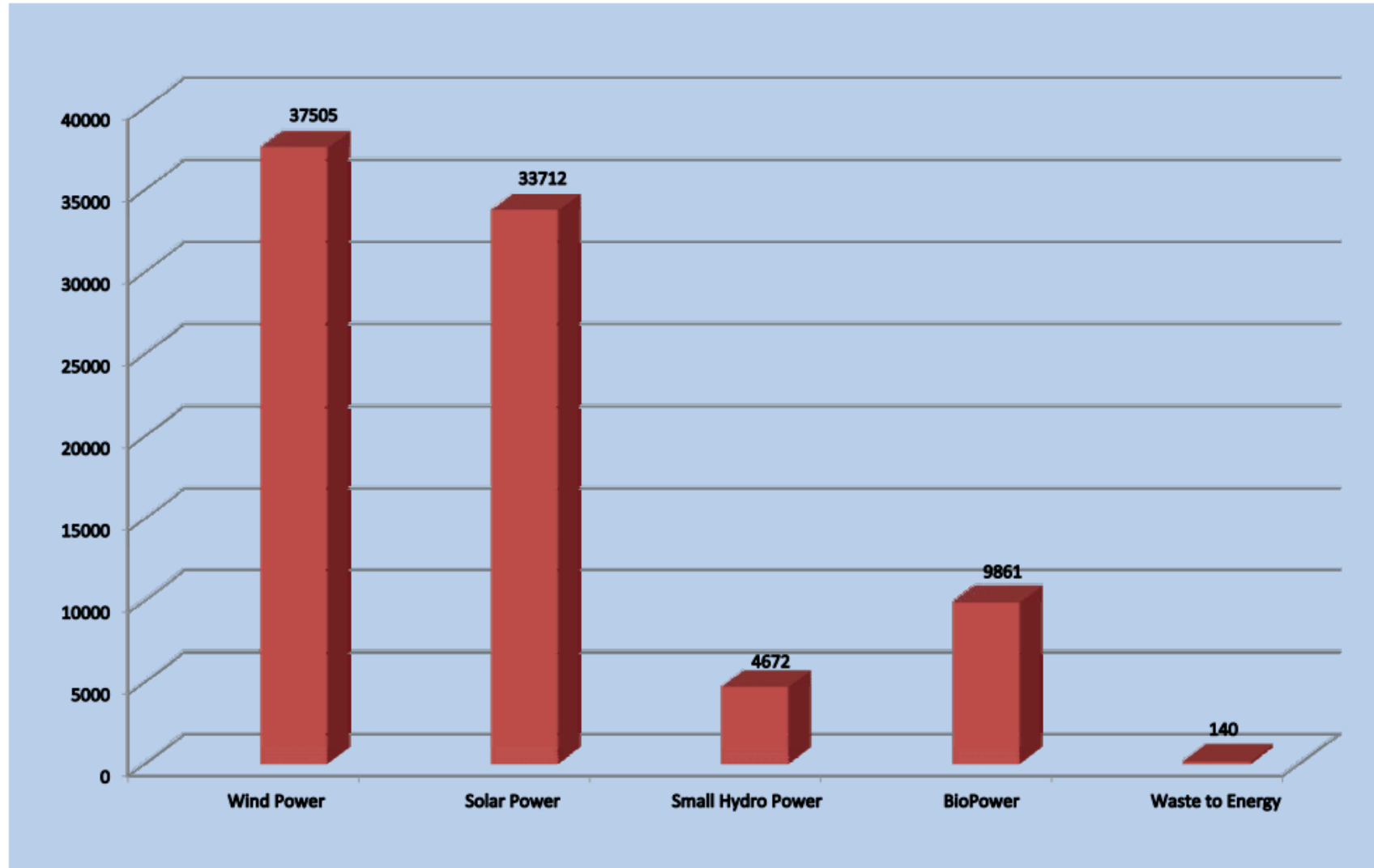
# Indian Perspective

Table 25 Country attractive index of the 52<sup>nd</sup> edition-2010 of Renewable energy 8 [67]

From: [Renewable energy for sustainable development in India: current status, future prospects, challenges, employment, and investment opportunities](#)

Overall rank	Previous rank	Country	RECAI score	Technology-specific score (out of 100)							
				Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermal	Hydro power	Marine
1	1	China	65.7	51	55	53	33	45	21	52	19
2	2	USA	63.8	50	53	49	32	39	39	35	31
3	4	India	63.8	50	20	57	34	44	25	45	21
4	3	Germany	62.7	46	50	49	17	44	34	35	20
5	6	France	62.5	50	51	48	22	48	33	31	36
6	5	Australia	62.3	47	30	54	35	24	21	39	31
7	8	Japan	59.2	43	44	47	18	51	48	36	23
8	7	UK	58.6	47	57	41	14	47	27	32	33
9	9	Netherlands	58.6	44	48	45	15	33	23	24	15
10	13	Argentina	58.6	45	21	50	30	37	32	37	20
11	11	Chile	56.7	43	20	47	32	37	31	41	28
12	15	Morocco	56.6	42	17	51	31	16	15	20	14
13	12	Mexico	56.3	43	19	50	25	45	43	34	19
14	10	Denmark	55.7	44	48	39	15	44	17	22	24
15	20	Egypt	54.9	45	14	52	36	13	12	27	12

**Fig. 1.2: Sector Wise Renewable Energy Cumulative Achievements (MW as on 31.12.2019)**



Source: <https://link.springer.com/article/10.1186/s13705-019-0232-1#Sec2> published on 7 January 2020



SOLAR CAPACITY INCREASED IN THE LAST 5.5 YEARS FROM AROUND **2.6 GW TO MORE THAN 34 GW**

WORLD'S LARGEST RENEWABLE ENERGY EXPANSION PROGRAMME **175 GW TILL 2022**

RENEWABLE ENERGY HAS A SHARE OF **23.39%** IN THE TOTAL INSTALLED GENERATION CAPACITY IN THE COUNTRY  
I.e. **368.98 GW** (Upto 29th February, 2020).

India now at **5TH GLOBAL POSITION**  
for overall installed renewable energy capacity

SOLAR POWER TARIFF REDUCED BY MORE THAN **75%** USING PLUG AND PLAY MODEL

ABOUT 19 TIMES HIGHER SOLAR PUMPS INSTALLED BETWEEN 2014-19 | **2.25 LAKH** VERSUS UPTO 2014 - 11,626

RENEWABLE ENERGY INSTALLED CAPACITY INCREASED **226%** IN LAST 5 YEARS

SOLAR PARK SCHEME DOUBLED FROM **20GW TO 40GW**

RECORD LOW SOLAR TARIFF **RS 2.44/UNIT** ACHIEVED IN BHADLA, RAJASTHAN

HIGHEST EVER WIND CAPACITY ADDITION OF **5.5 GW** IN 2016-2017

## INSTITUTES & AGENCIES

**National Institute of Solar Energy**

[VISIT NOW ↗](#)

**National Institute of Wind Energy**

[VISIT NOW ↗](#)

**SSS National Institute of Renewable Energy**

[VISIT NOW ↗](#)

**The Indian Renewable Energy Development Agency**

[VISIT NOW ↗](#)

**Solar Energy Corporation of India**

[VISIT NOW ↗](#)

**Association of Renewable Energy Agencies of States (AREAS)**

[READ MORE ↗](#)

# Support Measure & Incentives

- Ministry of New & Renewable Energy (MNRE)
- A comprehensive policy framework on RD&D is in place to support RD&D in new and renewable energy sector and market development.
- Financial Support
  - **100% to Government/non-profit research organizations/NGOs**
  - **50% to industry.**
- Reserve Bank of India has included renewable energy projects under **priority sector** lending for which bank loan up to **15 cr (INR) for renewable energy projects** and for individual household loan limit is 10 lakh (INR)

- Sustainable Finance Scheme
- **SIDBI** has introduced a new scheme called the Sustainable Finance Scheme for funding sustainable development projects that contribute energy efficiency and cleaner production
- (<https://www.startupindia.gov.in/content/sih/en/government-schemes/sustainable-finance-scheme.html>)
  
- Government Incentives to IGBC-rated Green Building Projects
- (<https://igbc.in/igbc/redirectHtml.htm?redVal=showGovtIncentivesnosign>)
  
- **Joint Clean Energy Research and Development Centre (JCERDC)**  
An initiative launched by US-India in 2009 for advancement of Clean Energy and address global energy and environmental sustainability challenges

What's there for IP?

- As per National IP Policy
  - **2.18:** *Provide special incentives for creation of IPRs in green technologies and manufacture of energy efficient equipment*
- No any supportive measure from IP Office till date specifically for
  - IPR generation,
  - Technology Transfer
  - Commercialization
- Wait and Watch

# Challenges

- Economic development Vs Social development
- Industrial lobbying
- Government Policy
- No any incentive from IPR perspective
- Lack of Rol or uncertainty of success

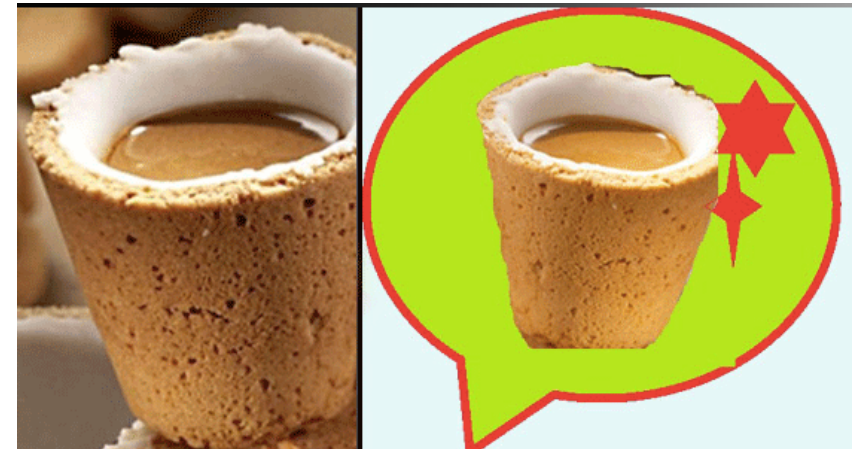


# Case studies

# NASOFILTER



# EdiblePro



Source: <https://ediblepro.com/>

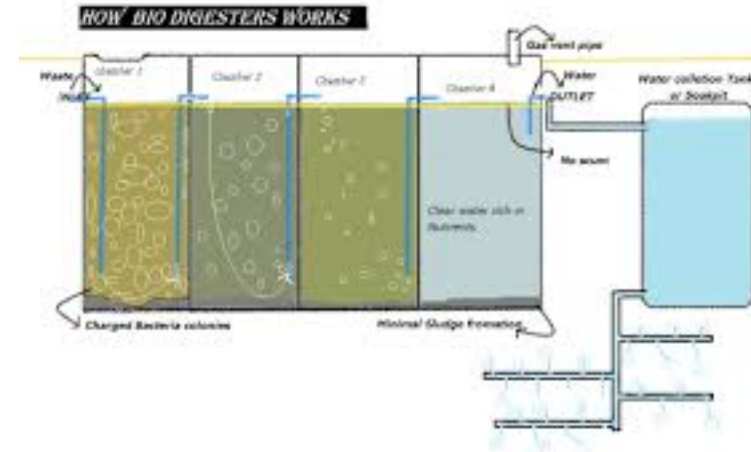
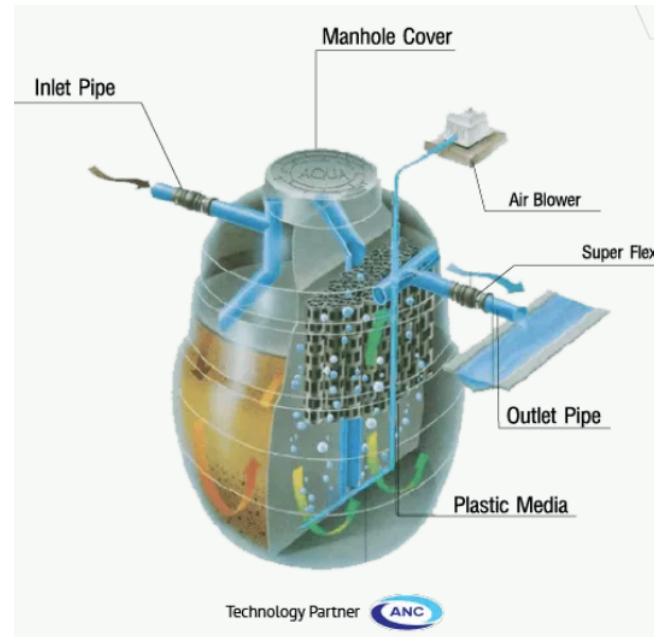
# AIR-INK



# BANKA BIOLOO



**BANKA BIOLOO LIMITED**



# BANKA BIOLOO

## NATIONAL IMPACT



**10,000+**

Bioloos across  
22 states



**1.5+**

Million liters of  
water recycled



**1,000+**

Youth employed, primarily  
from low-income families



**2,000+**

Bio-tanks installed in  
train coaches



**13,000+**

Bio-toilets maintained and  
monitored daily in train  
coaches



**1,500+**

Schools provided bio-toilet  
blocks through CSR

Try to leave the Earth a  
better place than when you  
arrived.

Sidney Sheldon



ありがとう  
Arigato \* Thank You

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