



**Ministry of Petroleum and Natural Gas**  
**Government of India**



# North-East Region: Prominent Energy Hub



# Our Prime Minister

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**My vision for India's energy future has 4 pillars – Energy access, Energy efficiency, Energy sustainability and Energy security**



*- Shri Narendra Modi, Hon'ble Prime Minister*

# India: A Growing Large Economy With Strong Fundamentals



## FDI Inflow

USD 319 billion (5 yrs)



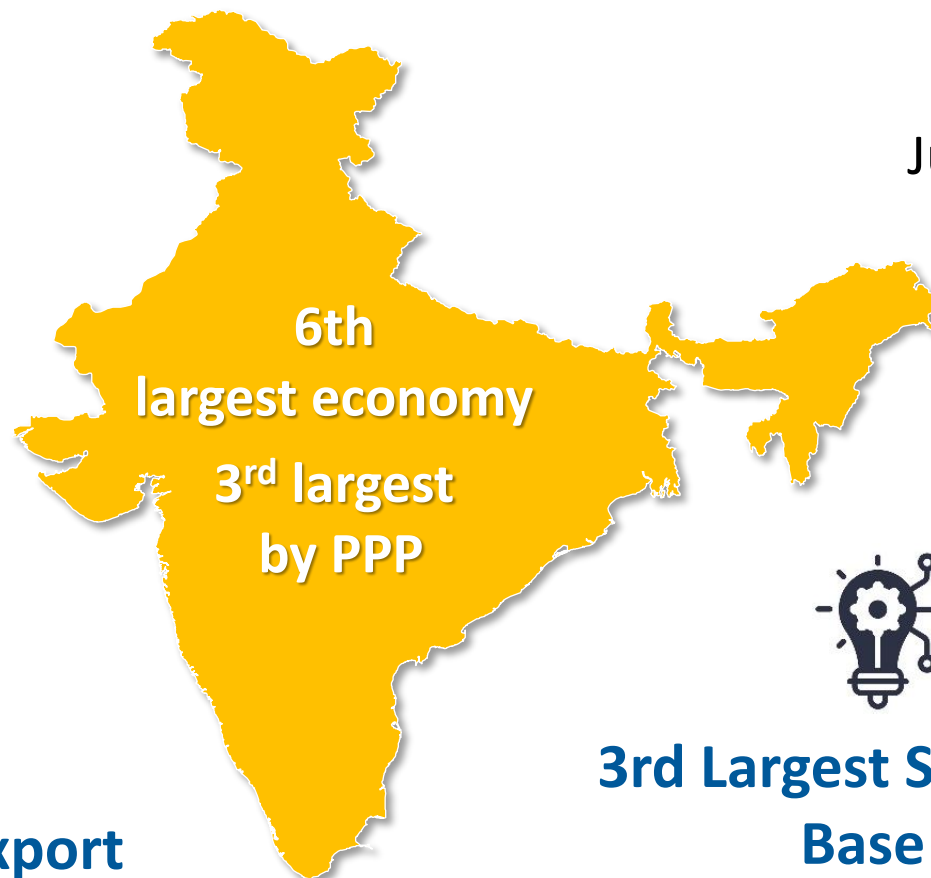
## Forex Reserve

USD 641 billion



## Commodity Export

42% increase (from 2010 to 2018)



## Ranked 63 in EODB 2020

Jump of 79 ranks in last 5 years



## Youngest Workforce

>62% population



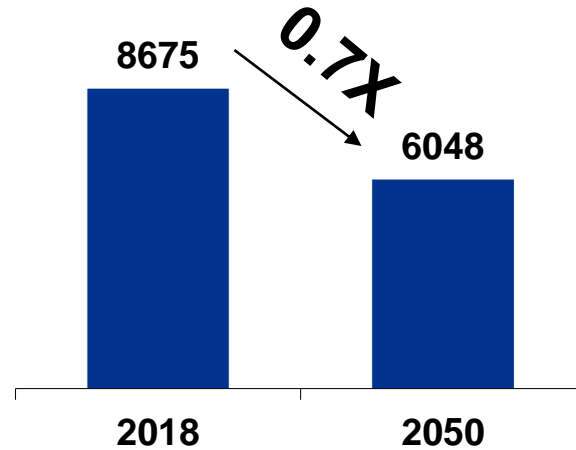
## 3rd Largest Start-Up Base

50,000+ Start-Ups

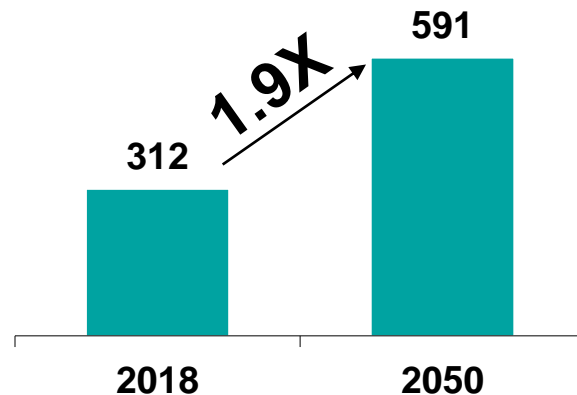
An expanding economy, population, urbanisation and industrialisation mean that India sees the largest increase in energy demand of any country to 2040

# India Will Drive The Future Incremental Global Energy demand

World (Oil +Gas)  
Consumption (MMTOE)



India (Oil +Gas) Consumption  
(MMTOE)



**Global industry experts are enthused on India's role in defining global energy landscape...**

**"India 2<sup>nd</sup> biggest driver of global energy consumption in 2019: BP Statistical Review**

*The Economic Times, 2020*

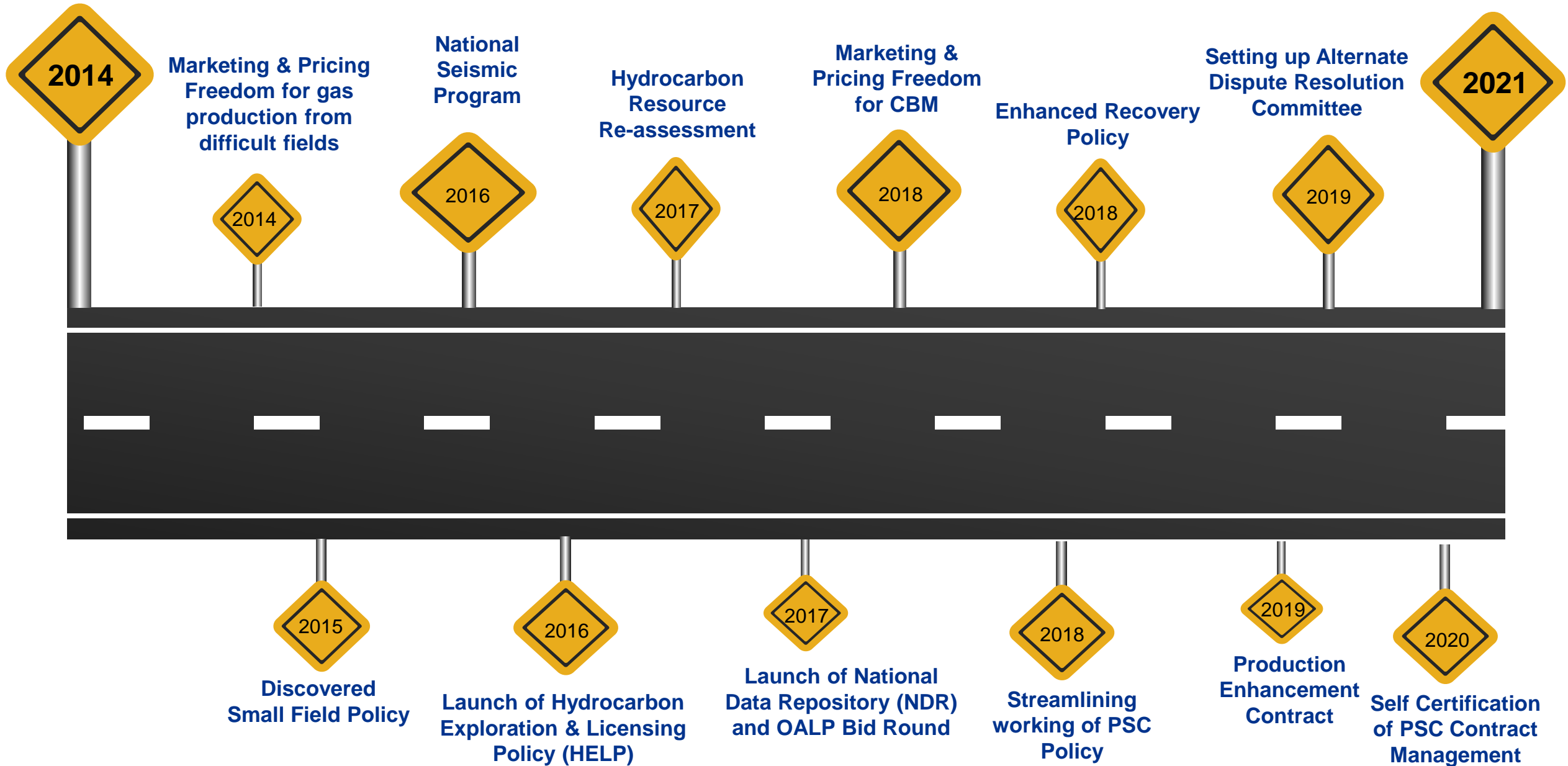
**"India will lead global recovery in Energy demand"**

*IEA, October 2020*

**"India to emerge as the leading energy consumer over the long term. India to account for 16 per cent of the global economy by 2045"**

*World Oil Outlook, OPEC, 2020*

# A Slew of Transformative Initiatives in last 6 years



# Geoscientific Data Initiatives

## Hydrocarbon Resource Reassessment Study, (2017)\*\*

**49.1% increase**  
in Hydrocarbon resource estimate  
as compared to 1995

## National Data Repository

Centralised repository of  
geoscientific data

**2.325 Million LKM**  
2D data populated\*

**0.788 Million SKM**  
3D data populated\*

## National Seismic Programme

Launched to conduct  
assessment of unapprised  
areas

**~43,952 LKM \***

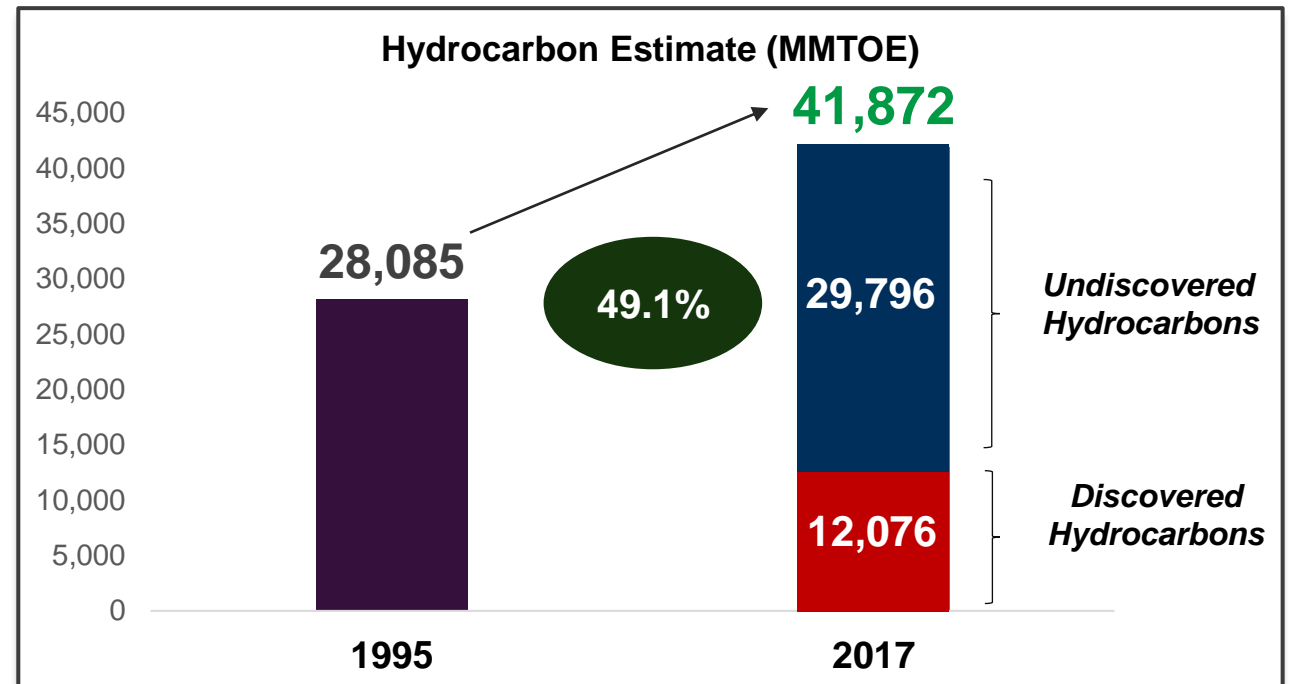
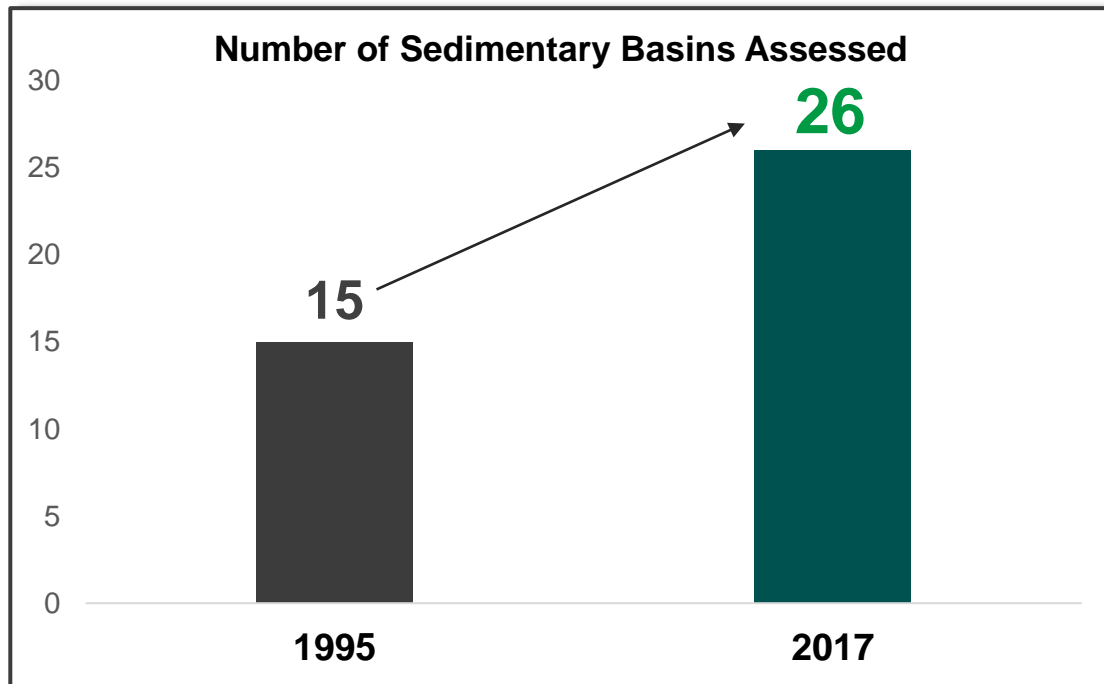
data acquired and progressively being  
uploaded on NDR

## Other forward looking changes

- No go areas in Andaman basin being released for E&P activities
- Govt. initiated **pre clearing of blocks with different agencies** such as Defence and Environment
- Govt. taking measures to expedite PEL grant

# Hydrocarbon Resource Reassessment Study, 2017

Govt. conducted Hydrocarbon Resource Reassessment in 2017, resulted in increase in Hydrocarbon resource estimates by **49.1%** (as compared to 1995 Study)



About **70% of undiscovered in-place under yet-to-find** category (~230 billion barrels of oil equivalent)

Out of total sedimentary basinal area of 3.36 million Sq. Km, **~47%** is under explored

# National Data Repository and National Seismic Programme

**National Data Repository (NDR): Centralised repository of geoscientific data of Indian basins**

## Key features

Ease of Access

Integrated with GIS browser

Virtual Data Room

Seamless Data Exchange

Cutting Edge Technology

High Quality Data

## G&G Data available

2D Seismic Data :  
**2.812 Million LKM**

3D Seismic Data :  
**0.933 Million SKM**

Seismic Reports: **15,507 nos.**

Well and log data: **20,114 nos.**

Well Reports: **41,422 nos.**

## Users



**251+**  
Companies



**760+**  
Users

## National Seismic Programme (NSP)

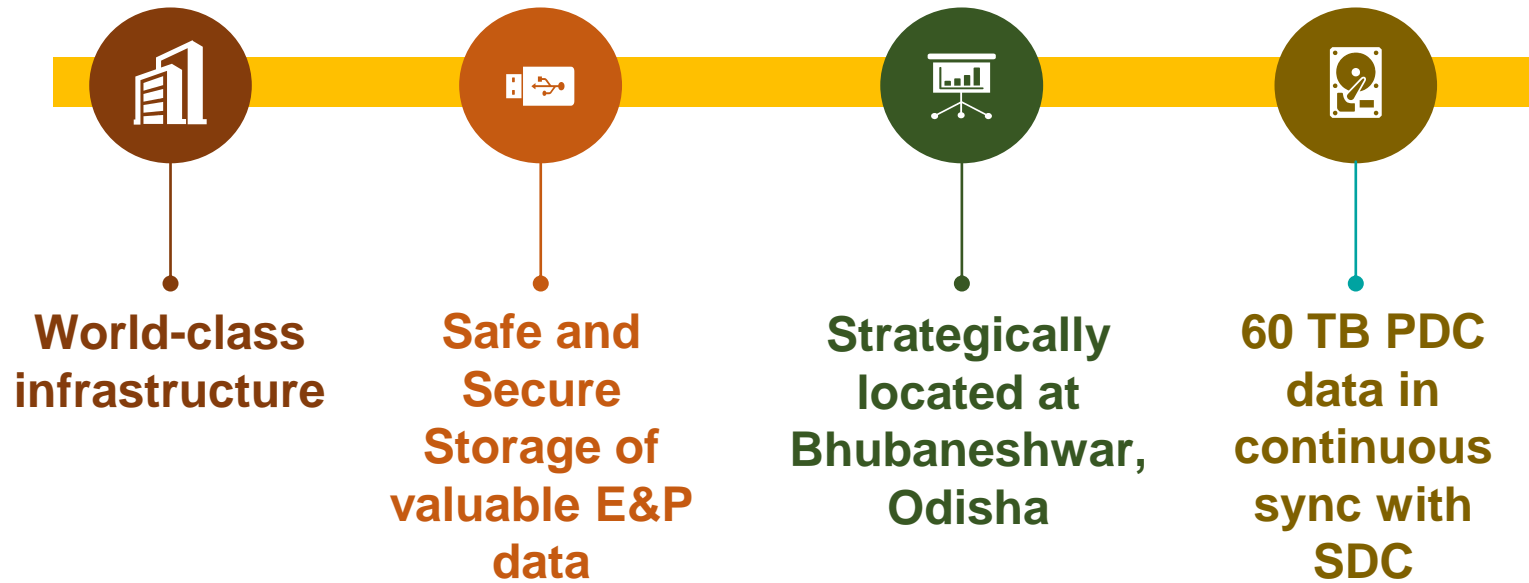
Launched to conduct assessment of unapprised areas for potential O&G reserves

As on January 2020, **~43,952 LKM** data acquired and is progressively being uploaded on NDR



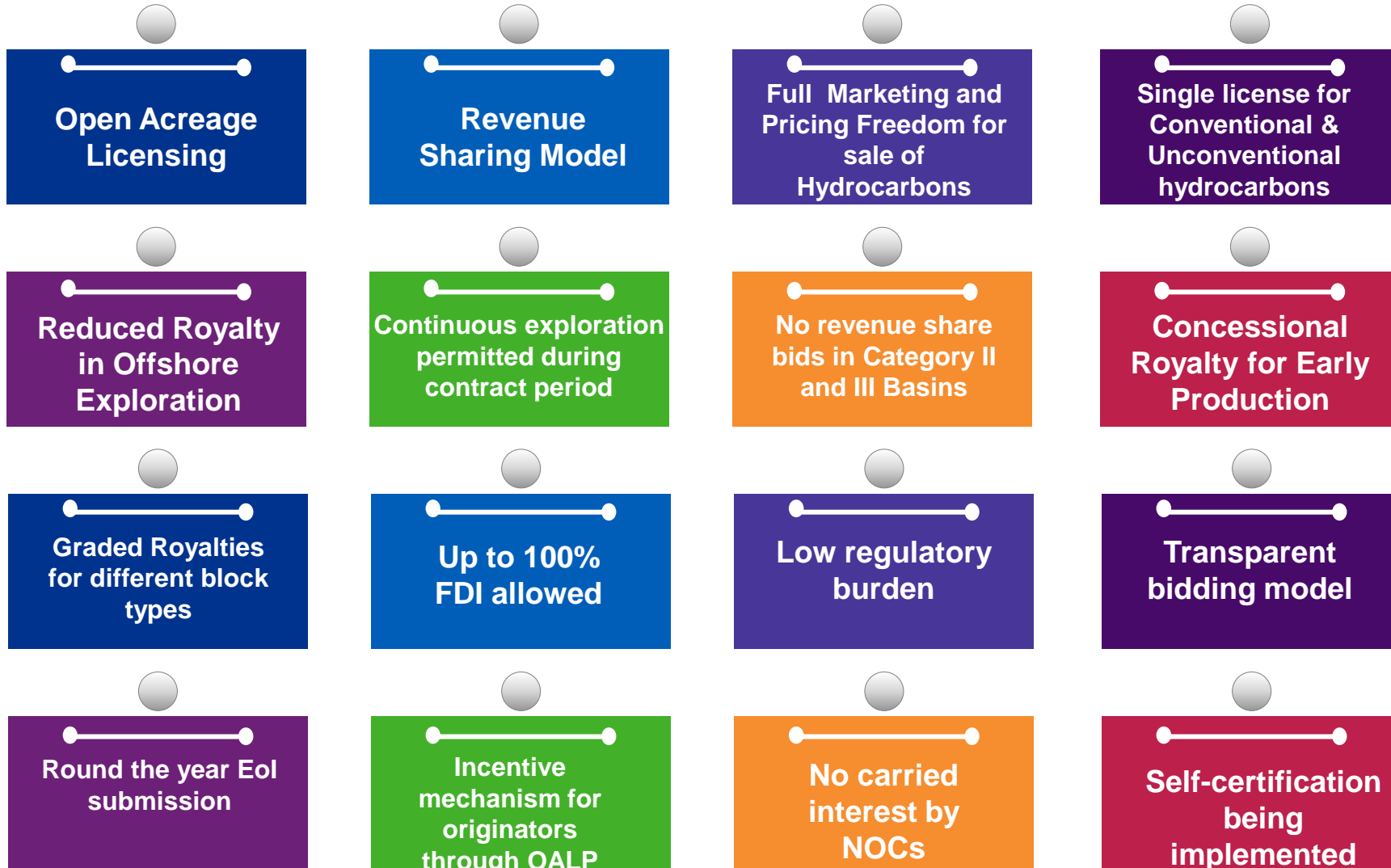
# Secondary Data Center (SDC) of NDR at Bhubaneswar

## Disaster Recovery and Business continuity Centre of NDR

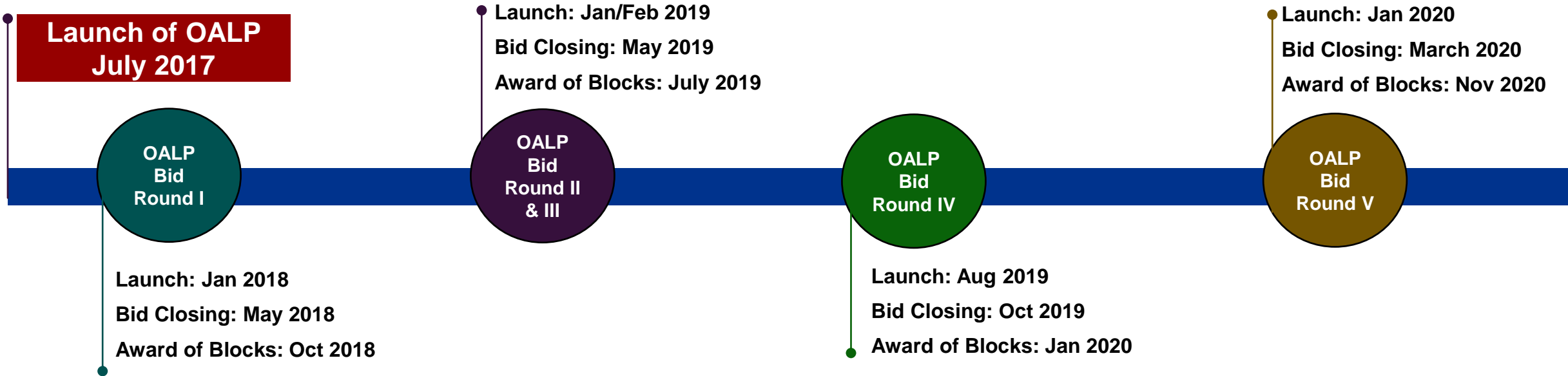


# HELP - A Paradigm Shift in India's E&P Space

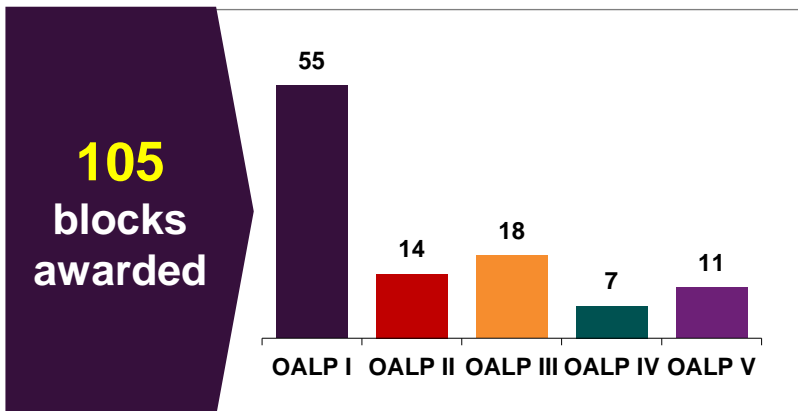
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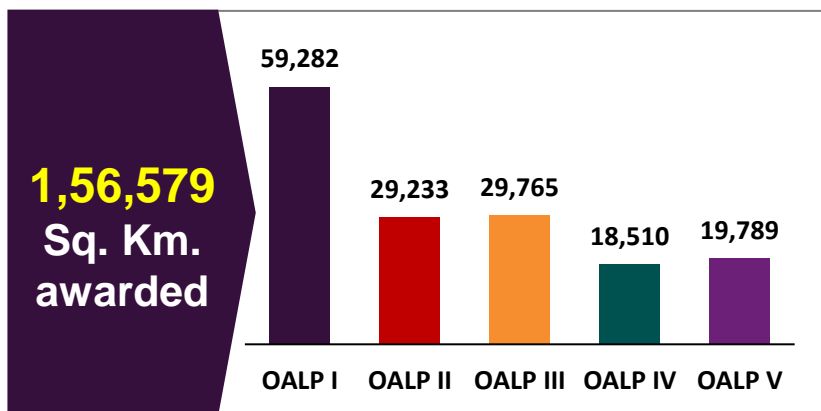
# OALP Journey



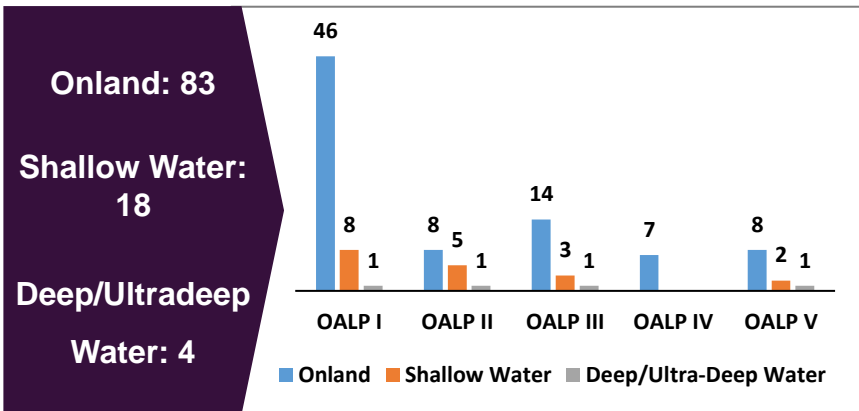
Number of blocks awarded



Area awarded (Sq. Km.)



Segregation of blocks

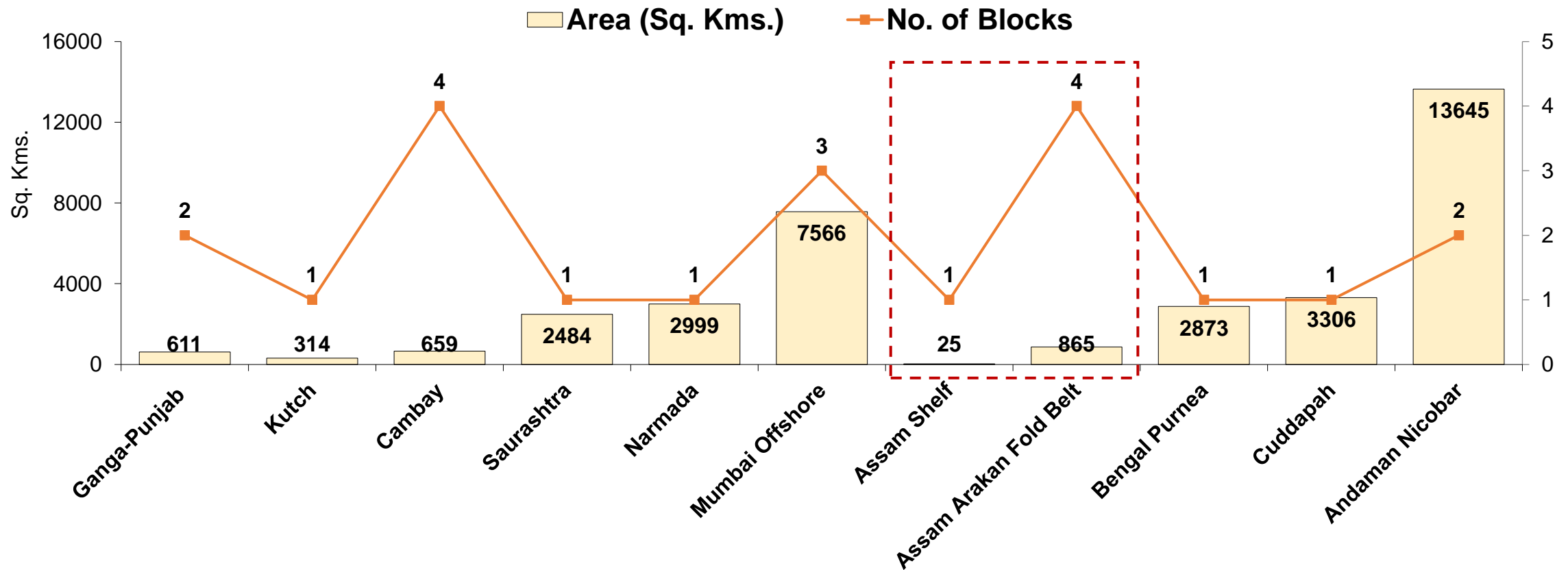


# Blocks on offer under OALP Bid round-VI

Blocks on offer in  
OALP Bid round VI

- 21 OALP blocks
- 11 Basins covered
- ~35,500 sq.km on offer

*Bidding window for OALP Round-VI is open till 6<sup>th</sup> October 2021*

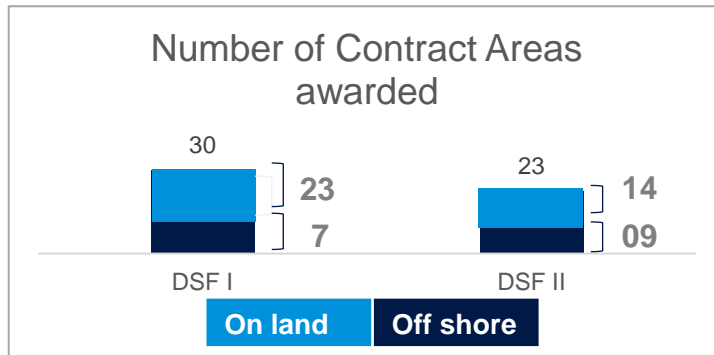


# Discovered Small Fields (DSF) Policy

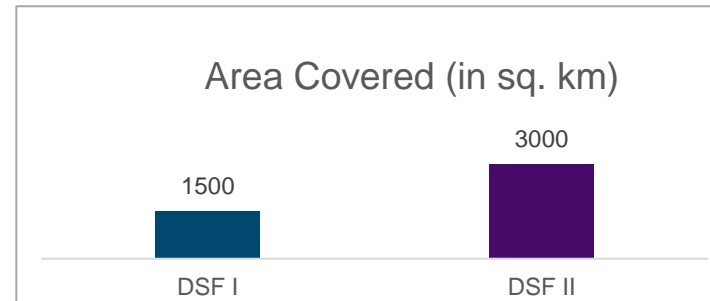
Estimated Revenue to be generated from DSF I and DSF II is ~ **USD 8 Billion**

Success  
Story So  
far  
(2016-2018)

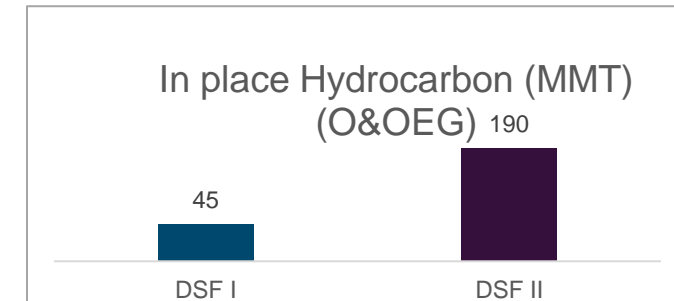
**53** blocks awarded



**4500** Sq. km. awarded



**~235 MMT**  
In place Hydrocarbon reserves

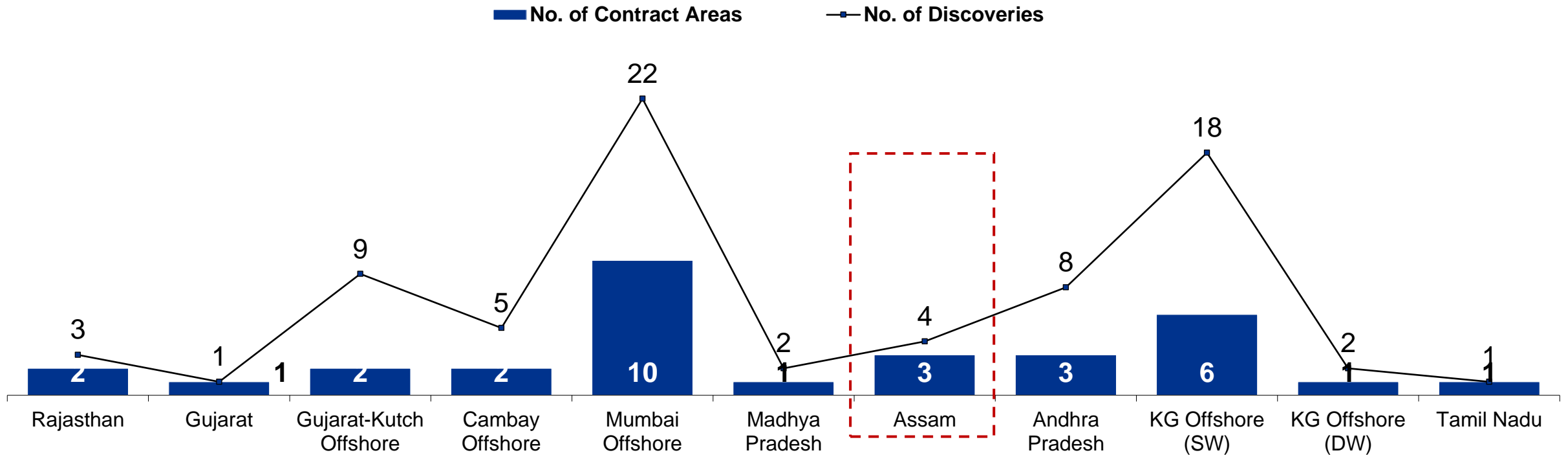


Key  
Features

- **No technical qualification criteria**
- **Revenue sharing contract** model with low regulatory burden
- **No minimum biddable work program**
- **Ready access to the entire E&P** data through National Data Repository (NDR)
- **100% participation allowed** from **foreign** companies/joint ventures
- **Discovered fields** offered in commercially producing & proven basins
- Sharing of Common Facilities

# Blocks on offer under DSF Bid round-III

**32 contract areas with 75 Discoveries with Hydrocarbon Resource Potential of 232 MMTOE**



# Special CBM Bid Round-2021

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**15 Coal Bed Methane (CBM) Blocks across four basins in 6 states**

**Prognosticated Resources  
~700 BCM**

- All Blocks on offer in Category-III basin i.e. no revenue sharing until windfall gain.
- Single License for Conventional & Un-conventional Hydrocarbon
- Full Marketing and Pricing Freedom for Gas produced.
- Exploration allowed during entire contract period.
- No overlap with existing/proposed Coal Blocks/Mines and Forest land.
- 100% participation from foreign companies/Joint ventures.
- Gas Pipeline infrastructure through GAIL Pradhan Mantri Urja Ganga Pipeline

# Policy to incentivize implementation of Enhanced Recovery Methods

**50%** waiver on cess for oil, **75%** waiver on royalty for gas

IR incentives on reaching a set benchmark

Applicable across all contractual regimes and nomination acreages

Fiscal incentives available for **120 months** from date of commencement of incremental production\*

**Sunset Clause**  
Policy effective for 10 years from date of notification

Policy Features

**Policy includes provision for fiscal incentives for Enhanced Oil Recovery (EOR), Enhanced Gas Recovery (EGR), Improved Oil and Gas Recovery (IOR/IGR) and Unconventional Hydrocarbon Production methods**

*\*In case of unconventional hydrocarbon fiscal incentive shall be applicable on entire production*



# North Eastern Region: Prominent Energy Hub

North-East Natural Gas Pipeline  
Grid (NEGG)- 1656 Kms

No. of E&P Companies - 21

CGD sales of 2.2 MMSCMD

Contributing 13% of country's  
crude oil production

Refining Capacity of 7 MMTPA

Contributing 16% of country's  
natural gas production



BCPL Petrochemical Plant with capacity of 280,000 Tonnes Per  
Annum of Polymer Production

# North Eastern Region: Oil and Gas Resource Potential

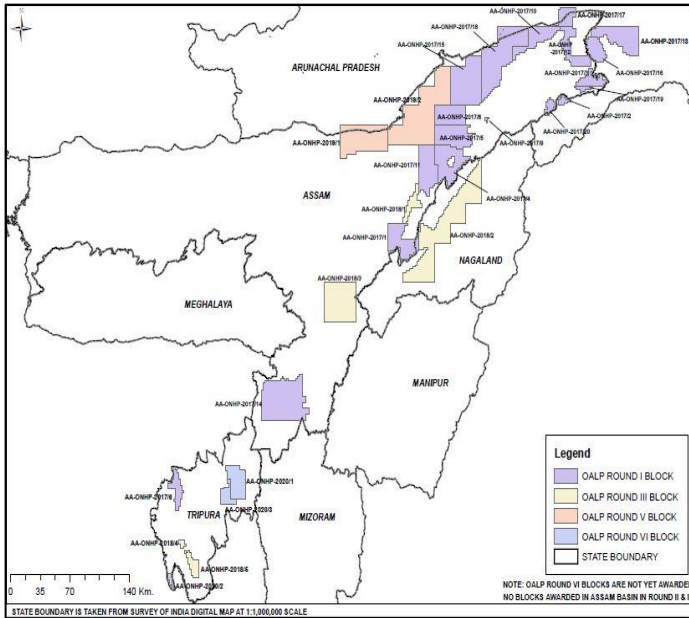
**Two Sedimentary Basins-  
Assam Shelf and Assam- Arakan Fold Belt  
(Total Basin Area- 1,36,825 sq. kms)**



**Oil is not there until we find it**

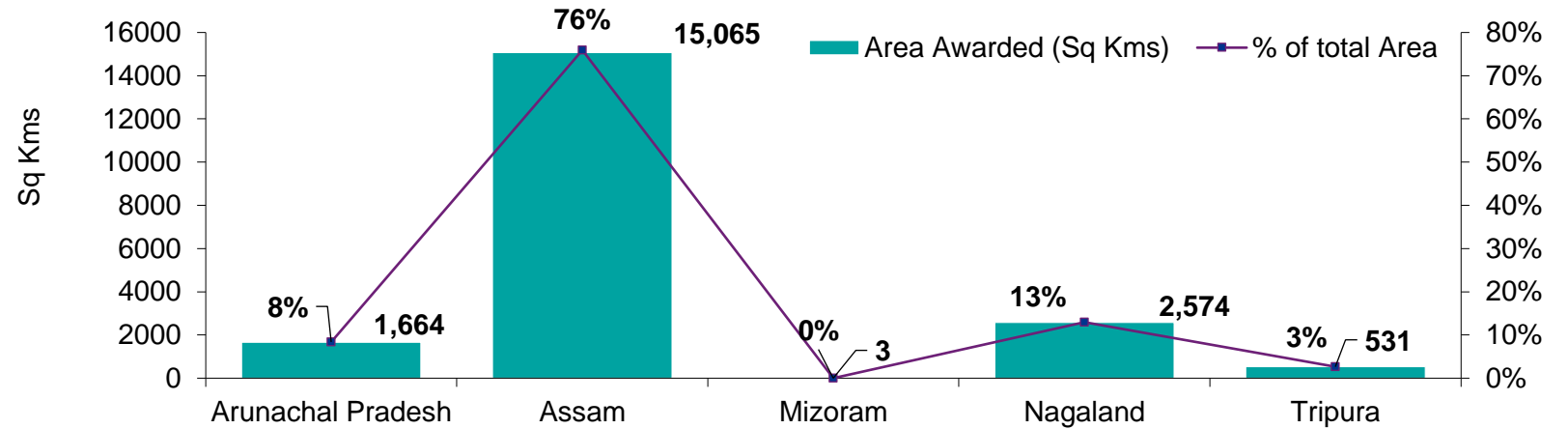
# E&P Activities Planned under OALP in North East Region

Map Of OALP round blocks in Assam Shelf and Arakan Fold belt basin



Committed work programme  
in next 3 to 4 years

Total 26 blocks awarded under OALP I, III and V  
Total Area Awarded- 19836 sq. Kms



Companies operating under OALP rounds- HOEC, OIL, ONGC, Vedanta

- 2D seismic data acquisition- **4455 LKM**
- 3D seismic data acquisition- **5215 SKM**
- No. of exploratory wells- **75**
- No. of core analysis- **72**

Total committed investment- **495 MMUSD**

# E&P Activities Planned under DSF in North East Region

**15 DSF Contract Areas**

(9 in Round I and 6 in Round II)

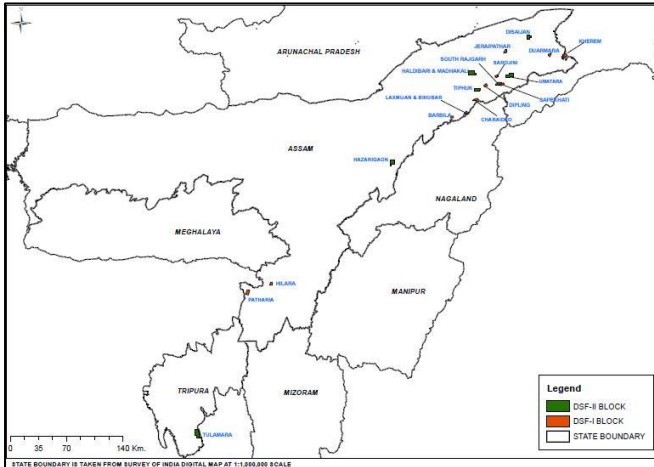
**9 viable FDPs being implemented**

(5 in Round I and 4 in Round II)

**Planned Investment of USD 110 Mn**

**Anticipated cumulative production of 2.5 MMT Oil and 3.8 BCM gas**

Map Of DSF blocks in Assam Shelf and Arakan Fold belt basin



#	Contract Area	DSF Round	Oil Peak Production (TPD)	Gas Peak Production (MMSCMD)	Production Commencement Schedule
<b>Assam</b>					
1	Barasilla	I	30	0.003	FY 2022-23 (Q1)
2	Hazarigaon	II	-	0.1	FY 2021-22 (Q3)
3	Laxmijan	I	42	-	FY 2022-23 (Q1)
4	Disaijan	II	176	-	FY 2022-23 (Q1)
5	Charaideo	I	100	0.05	FY 2022-23 (Q1)
6	Duarmara	I	105	0.3	FY 2022-23 (Q1)
7	Dipling	I	187	0.04	FY 2022-23 (Q1)
8	Umatara	II	194	-	FY 2022-23 (Q4)
<b>Tripura</b>					
9	Tulamara	II	-	0.4	FY 2022-23 (Q4)

**DSF-III is under progress : 03 no. of contract areas with 612 sq kms having potential of 0.86 MMTOE**

# Key Information Touch Points



**Ministry of Petroleum and  
Natural Gas**

**Website-** <http://petroleum.nic.in/>

**Contact us:**

<https://mopng.gov.in/en/about-us/phone-directory>

**DGH**

**Directorate General of  
Hydrocarbons**

**Website-** <http://dghindia.gov.in/>

**Contact us:**

[http://dghindia.gov.in/contact\\_english.php](http://dghindia.gov.in/contact_english.php)

**National Data Repository**

**Website-** <https://www.ndrdgh.gov.in/NDR/>

**Email:** [indr@dghindia.gov.in](mailto:indr@dghindia.gov.in)

**Hydrocarbon Exploration and Licensing Policy  
OALP Bid Rounds**

**Website-** <http://online.dghindia.org/oalp/>

**Facilitation Desk**

**Email:** [Facilitationoal@dghindia.gov.in](mailto:Facilitationoal@dghindia.gov.in)

**DSF Bid Rounds**

**Website-** <http://online.dghindia.org/dsf3>

**Facilitation Desk**

**Email:** [Facilitationdsf@dghindia.gov.in](mailto:Facilitationdsf@dghindia.gov.in)

*For DSF and CBM bid rounds, Data is available on cloud*



# A new E&P Paradigm

*Driving investments into one of the World's fastest growing economies*



Ministry of Petroleum & Natural Gas  
Government of India



**DIRECTORATE GENERAL OF HYDROCARBONS**  
(Ministry of Petroleum & Natural Gas, Government of India)