

Ministry of Petroleum and Natural Gas Government of India

India Exploration and Production The Investment Framework



Directorate General of Hydrocarbons

Houston, USA March 13, 2019

Transition from NELP to HELP with Open Acreage Licensing

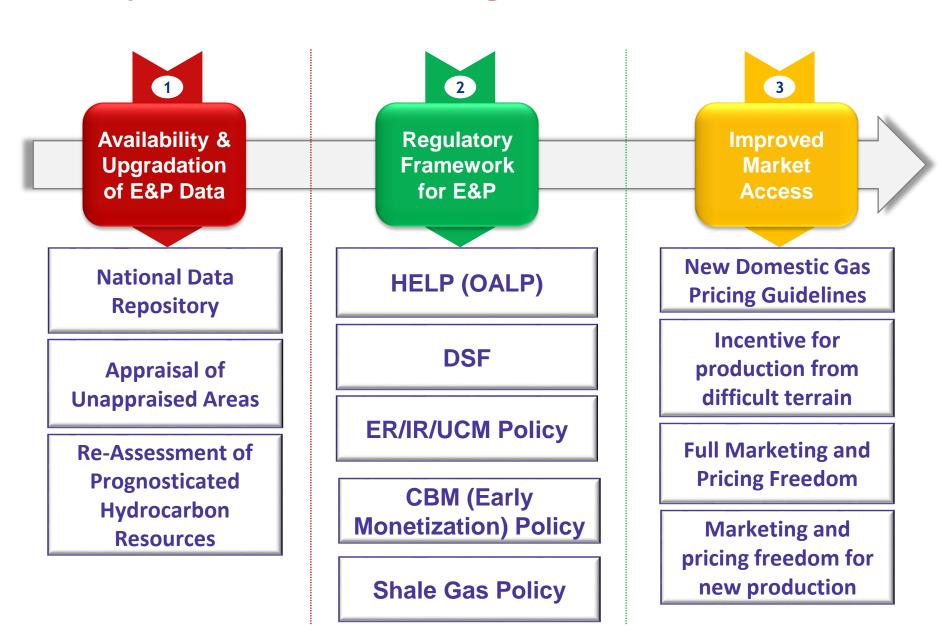
NELP

- ➤ After Pre-NELP rounds, New Exploration and Licensing Policy (NELP) launched in 1999.
- ➤ Production Sharing Contract (PSC) with Pre Tax Investment Multiple (PTIM).
- ➤ System based on Cost Recovery which meant Audit of Cost lead to dispute and larger regulatory burden.
- ➤ Government carved out blocks for bidding, investors had little choice.
- ➤ Nine rounds launched since 1999: 254 blocks awarded till date of 156 discoveries have been made.
- ➤ USD 40 billion invested (till date), further USD 25 billion in the pipeline.

HELP and OALP

- ➤ Hydrocarbon Exploration Licensing Policy (HELP) launched in 2016.
- ➤ Single License for both conventional and unconventional Hydrocarbons.
- ➤ Freedom to carve out blocks, EoIs can be made round the year with bidding rounds in 6 months cycles.
- > Transition from Cost Recovery mechanism to Revenue Sharing mechanism.
- > Full Marketing & Pricing Freedom.
- > Fiscal Incentives-Low graded royalty rates.
- > Low regulatory burden.
- > Exploration rights on all retained area for full contract life.
- ➤ 100% PI allowed for foreign / private players.

Policy reforms in oil and gas E&P sector



There are vast investment opportunities in Indian sedimentary basins under the flagship Hydrocarbon Exploration and Licensing Policy (HELP)

Hydrocarbon Exploration and Licensing Policy (HELP)

Open Acreage Licensing Policy (OALP)

- Exemplifies Ease of Doing Business
- Ready access to G&G data and freedom to carve out acreage of choice

Discovered Small Fields (DSF) Policy

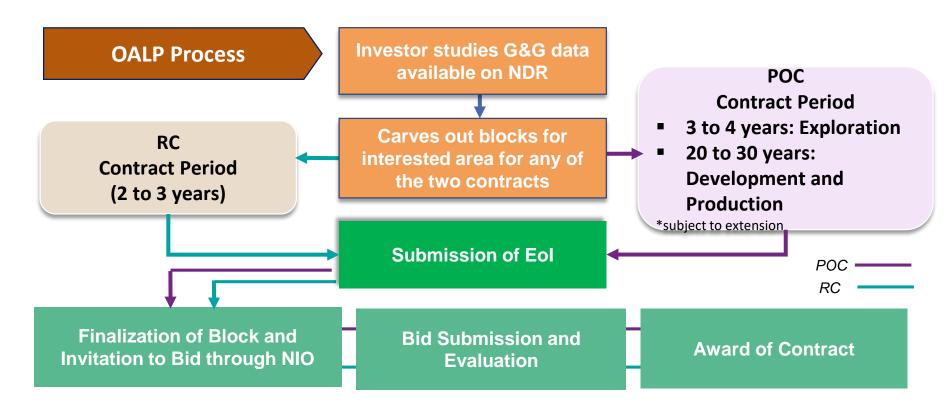
- To commercialize production from the already discovered small fields of NOCs
- Low risk investment opportunities for new entrants

National Data Repository (NDR)

State of the art centralized data repository on Indian sedimentary basins accessible through an e-platform



Enabling Ease of Doing Business for E&P Investors through OALP Process: Freedom to carve out blocks



- Party submitting EOI for an area shall be 'Originator' and eligible for originator incentive
- Sedimentary basins gridded into sector of 10' x 10' (1' x 1' for existing PEL/PML)
- Bidding cycle twice a year (continuous EOI submission, pooled every 6 months)
- Bidding through fully secured e-bidding platform

Key OALP Cycle Timelines for Investors

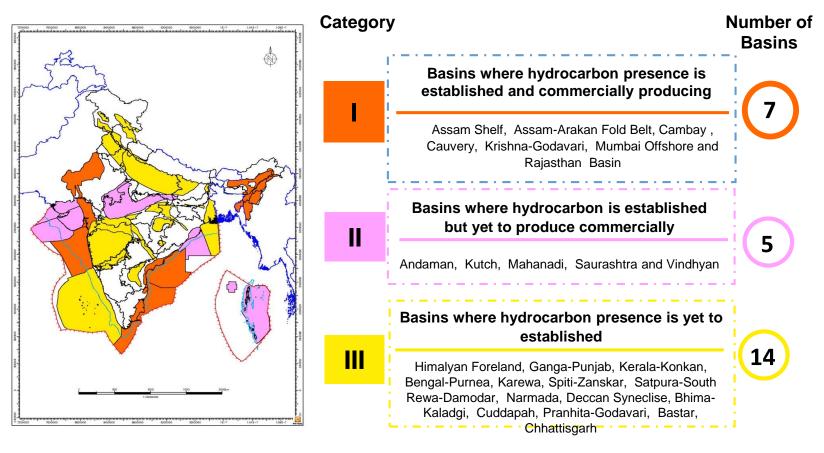
		Timeline (Closing Dates)							
	Key Milestones	Window 1	15 th Nov	31 st Dec	Jan	April	May	June	
	ivillestories	Window 2	15 th May	30 th June	July	Sep	Nov	Dec	
1	Cut off Date for Bid Rounds				Timin	g is critic	cal to ava	il <u>Origina</u>	tor's Incentive
2	Finalization and Review of Eol								
3	Issue of Bid Document					DGH	l to Evalu	ate Eols	and Issue NIOs
4	Bid Submission Deadline						ICB f	or the id	entified Blocks
5	Bid Evaluation and Award (on or before)								
6	Contract Signing (on or before)								Contract Signing

Current Bidding Timelines

Bidding	Launch	Bid Closing	Contract Award
Round-II	January 2019	April 2019	June 2019
Round-III	February 2019	April 2019	June 2019

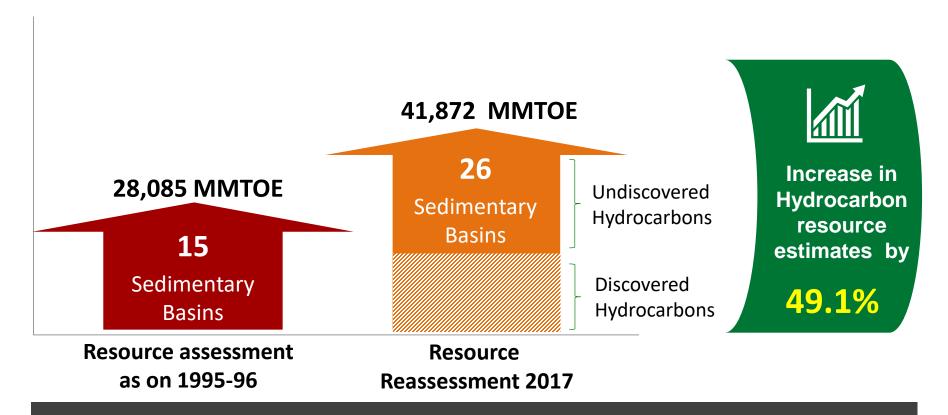
India's Hydrocarbon Potential: Sedimentary Basins

India has 26 sedimentary basins covering an area of 3.36* million square kilometres



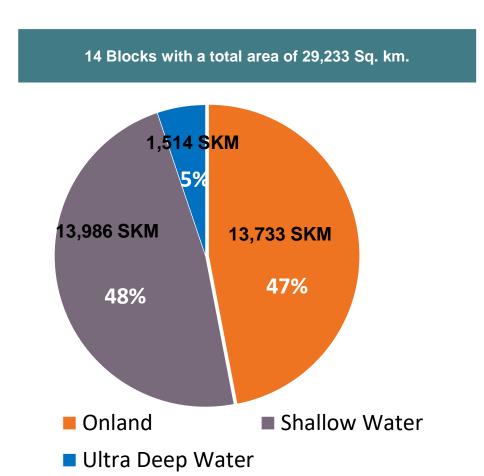
*As per Hydrocarbon Resource Reassessment Study 2017, Subject to approval from MoPNG

A quantum leap in the Prognosticated Hydrocarbon resources in India through Resource Reassessment 2017



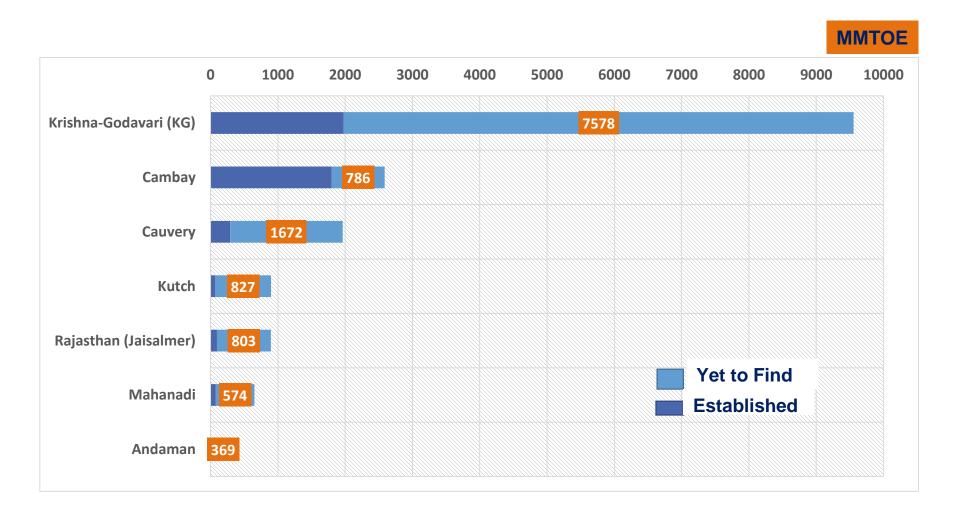
- Total Hydrocarbon reassessed resources (in place) estimated for 26 sedimentary basins across onland, shallow water and deep water areas in the present study is 41,872 MMTOE
- Discovered Hydrocarbons is 12,076 MMTOE
- Undiscovered Hydrocarbons is 29,796 MMTOE

Sedimentary Basin-wise Distribution of offered Blocks under OALP-II



Sedimentary Basin	Number	Area (Sq km.)							
Ultra deep Water									
Krishna Godavari	1	1,514							
Onland									
Mahanadi	4	11,809							
Cauvery	1	474							
Rajasthan	1	418							
Cambay	2	1,032							
SI	Shallow Water								
Andaman Basin	2	9,617							
Kutch Basin	2	2,544							
Mahanadi	1	1,825							
Total	14	29,233							

Resource Potential across Offered Basins under OALP-II



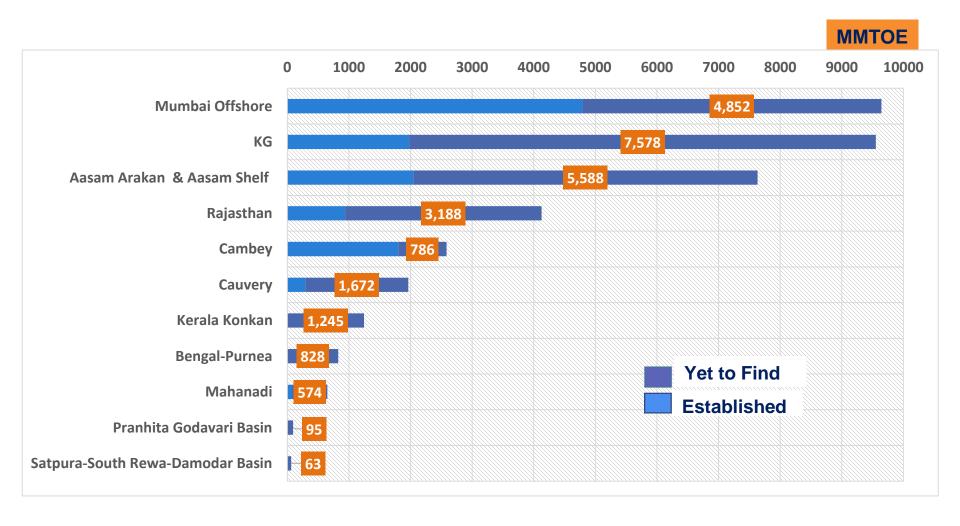
Sedimentary Basin-wise Distribution of Blocks under OALP-III

23 Blocks with an area of 31,722 Sq.Km.



Sadimentary Basin	Number	Aroa (Sa km)							
Sedimentary Basin		Area (Sq km.)							
Deep Water									
Mahanadi	1	2,491							
Onland (other than CBM)									
Mahanadi	1	2,300							
Assam Arakan & Assam Shelf	5	4,262							
Rajasthan	1	3,016							
KG	2	2,831							
Bengal-Purnea	1	2,468							
Cambay	2	1,078							
Cauvery	2	1,863							
Shallow Water									
Kerla Konkan	1	3,520							
Mumbai Offshore	2	5,936							
Total (A)	18	29,765							
Onland ((CBM)								
Satpura-South Rewa-Damodar Basin	4	1,332							
Pranhita-Godavari Basin	1	625							
Total (B)	5	1,957							
Total	23	31,722							

Resource Potential across Offered Basins under OALP-III



Bid Evaluation Criteria for Petroleum Operations Contract (POC)

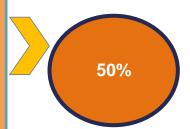
Hydrocarbons other than CBM

Coal Bed Methane (CBM))

Weightage

Revenue Share The revenue share will have to be bid at LRP (USD 0.05 million/day) & HRP (USD 7.00 million/day)

The revenue share will have to be bid at LRP (USD 0.01 million/day & HRP (USD 0.50 million/day)





Work Programm e

Bidders have to bid for

- Seismic Survey (25 marks),
- Exploratory Wells 15 marks),
- Core Analysis (5 marks).

Bidders have to bid for -

- No. of Core Holes (25 marks),
- No. of Test Wells (20 marks).

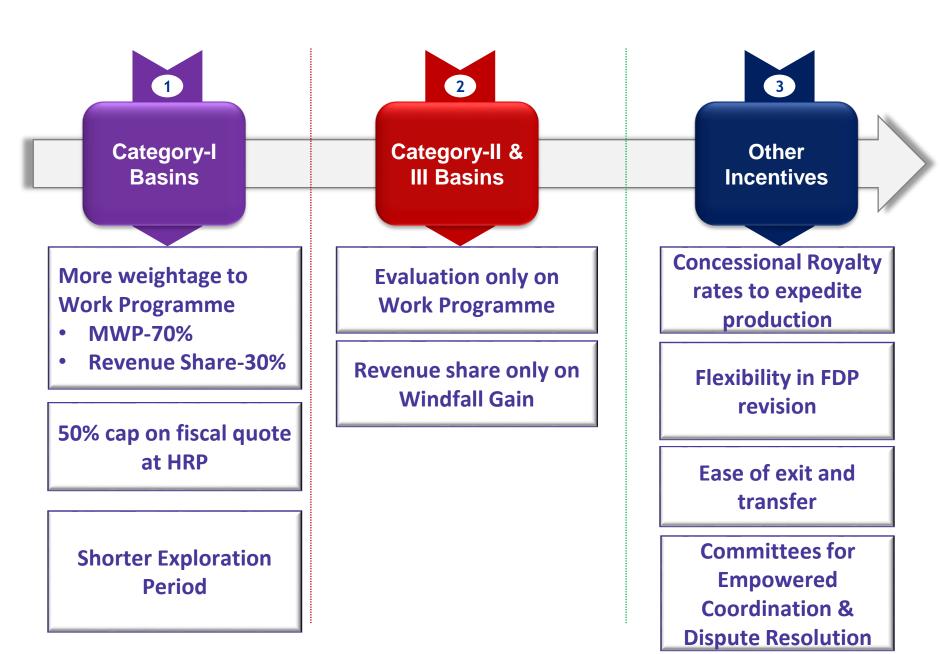


Originator Incentive Investor who has submitted an EoI for carving out a block shall be the originator.

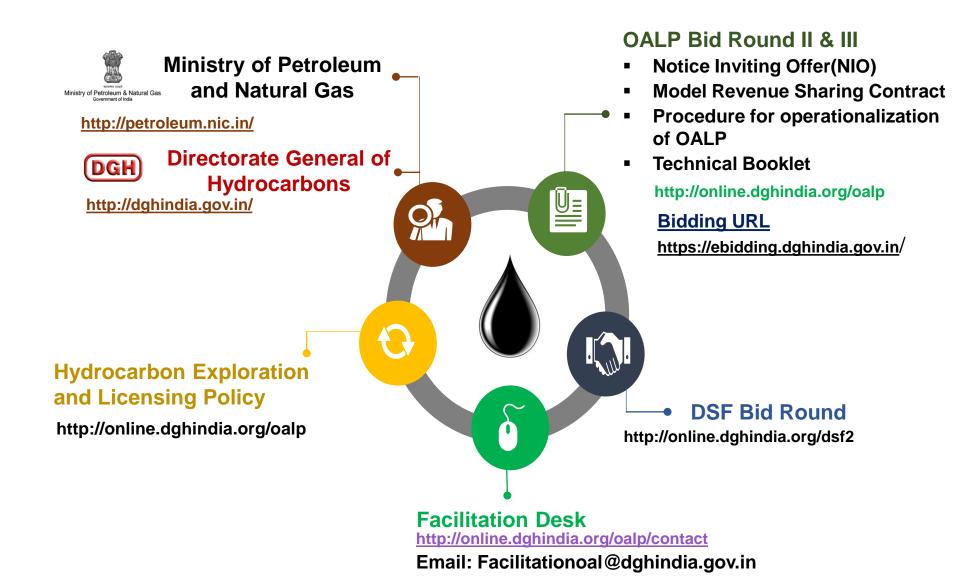
Investor who has submitted an EoI for carving out a block shall be the originator.



Proposed simplification of HELP



Key information touch points



Thank you

Directorate General of Hydrocarbons

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REFORMS IN HYDROCARBONS EXPLORATION AND LICENSING POLICY (HELP)

Government notifies the HELP reforms on 28th February, 2019.

Objectives and Aspects of Policy Reforms:-

S. N.	Objectives	Measures Taken
1	To increase exploration activities, attract domestic and foreign investment in unexplored/unallocated areas of sedimentary basins.	 Change in Bid-Evaluation Criteria- Core goal moving from revenue-maximisation to production-maximisation Shorter exploration period Fiscal incentive for commencement of early production
2	To enhance and expedite domestic production of oil and gas from existing fields	 Concessional royalty rates will be applicable to expedite production. Marketing and pricing freedom for new gas discoveries. Fiscal incentive on additional gas production from domestic fields over and above normal production.
3	To promote ease of doing business by streamlining.	> Setting up coordination mechanism and alternate dispute resolution mechanism.
4	To expediting the approval processes	> Simplification of approval of DGH

Fiscal and Contractual Terms

Category-I Basins (Producing Basins)

Category-II and III Basins (Non-Producing Basins)

Change in Bid-Evaluation Criteria-

- ➤ Bidding will continue to be based on revenue sharing basis but more weightage to work programme. Weightage of MWP to Revenue share will be 70:30.
- ➤ Weightage of MWP will be 20% for seismic survey and 80% for Exploratory wells
- An upper ceiling of 50% at HRP on biddable revenue share to prevent unviable bids and to ensure that revenue sharing does not disincentivise higher production

- ➤ Exploration blocks would be bid out exclusively on the basis of exploration work programme without any revenue or production share to Government.
- ➤ Windfall gains-Government will take a share only in case there is windfall gain i.e. annual revenue (net of royalty) exceeding USD 2.5 billion.
- > Revenue Share slab rates :-

Revenue (Net of Royalty) (Billion USD)	GoI SHARE (%)
Up to 2.5	Nil
>2.5 <=5.00	10%
>5.00 <=10.00	30%
>10	50%

Timelines for completion of Minimum Work Programme (MWP)

> Onland and shallow water blocks:-

- 3 Years
- > Deep water and Ultra deep water Blocks:-
- 4 Years
- No time limit

Concessional Royalty Rates to expedite production-

Concessional rates will be applicable only if production is commenced within:-

- Four (4) years for Onland and shallow water blocks, and
- Five (5) years for deep water and Ultra deep water blocks

from the effective date of contract

	Crude Oil						Natural Gas/CBM					
Basin Category	Onland	Shallo w water	Deep	owater	Ultra-de	epwater	Onland	Shallow water	Dee	pwater	Ultra-dee	epwater
	Throug hout	Throug hout	First 7 Years	After 7 Years	First 7 Years	After 7 Years	Through out	Through out	First 7 Years	After 7 Years	First 7 Years	After 7 Years
Existing Royalty Rates under HELP	12.5%	7.5%	Nil	5%	Nil	2%	10%	7.5%	Nil	5%	Nil	2%
Category-I Basins	11.25%	6.75%	Nil	4.5%	Nil	1.8%	9%	6.75%	Nil	4.5%	Nil	1.8%
Category II Basins	10%	6%	Nil	4%	Nil	1.6%	8%	6%	Nil	4%	Nil	1.6%
Category III Basins	8.75%	5.25%	Nil	3.5%	Nil	1.4%	7º/o	5.25%	Nil	3.5%	Nil	1.4%

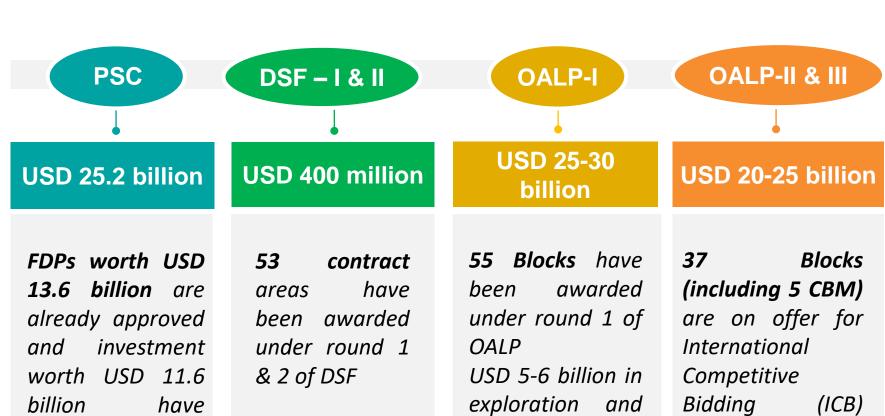
ER/IR/UCM Policy-Fiscal Incentives

Fiscal Incentive Parameters	Oil Production Projects	Gas Production Projects (Incentive ceiling USD 0.4/ mmbtu-Offshore and USD 0.3/mmbtu-onshore fields)				
A-OID Cess Applicable-OID Cess Wa	iver*/ Royalty Waiver in case of gas production proj	ects except nomination fields				
ER Projects	50% of Cess on incremental production of crude oil from designated wells.	75% of applicable royalty on incremental production of gas from designated wells.				
IR Projects	50% cess on entire production after crossing the prescribed recovery rate	75% of applicable royalty on entire production after crossing the prescribed benchmark recovery rate.				
UHC Projects	50% cess on entire commercial production of unconventional oil production	75% of applicable royalty on entire commercial production.				
Oil Cess waiver in case of Gas Production Projects of Nomination Fields	NA	Equivalent to 75% of royalty against OID cess payable on crude oil from any field of NOCs, preferable from on land crude production.				
B-OID Cess Not Applicable (For Oil Projects)** / In case of onshore fields where royalty is received by State Government (For Gas Projects)**	Calculate notional cess waiver and reduce equivalent amount from- Profit Petroleum- NELP Blocks GoI revenue share- OALP and DSF Blocks	Set off incentive amount from GoI share of- Profit Petroleum- NELP Blocks GoI revenue share- OALP and DSF Blocks				
	**In case there is no profit petroleum or revenue share- carry forward incentive amount for 120 months.					
	e oil price of Indian Basket declared by PPAC during e oil. However, this period will not be deducted from					

Upper ceiling on fiscal incentive- Cumulative waiver shall not exceed the total CAPEX incurred for undertaking ER/IR/UHC

methods.

Anticipated cumulative investment of ~USD 70-80 billion in Indian E&P Sector in coming 4-5 years

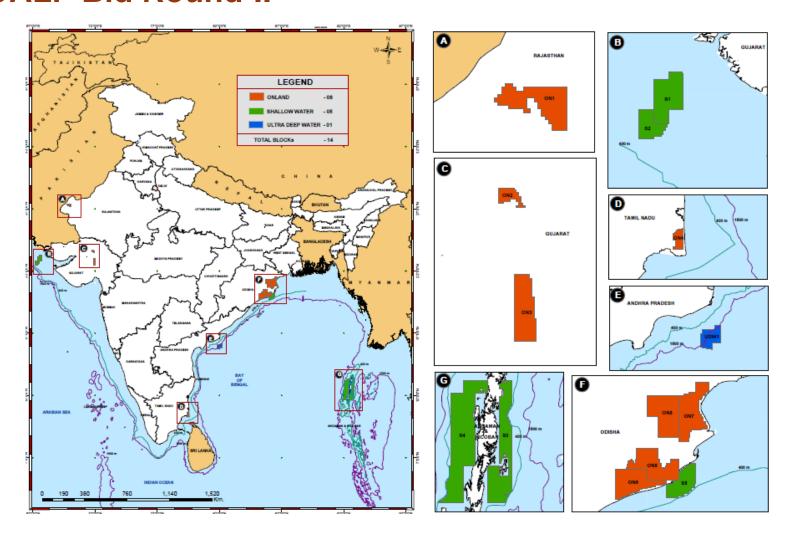


declaration of commerciality

USD 20-30 billion for development

under round 2 & 3 USD 5-6 billion in exploration and USD 15-20 billion for development

Final Maps with distribution of Blocks on Offer under OALP Bid Round-II



Final Map of Blocks on Offer under OALP-III

