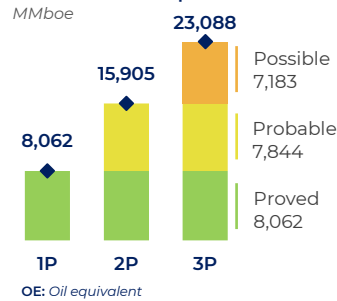


## Reserves as of January 1, 2020

### Reserves

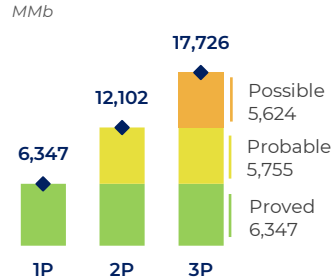
Quantities of hydrocarbons which are anticipated to be commercially recoverable through the application of development projects to known accumulations, from a given date forward, under defined conditions. To be considered as reserves, hydrocarbons must meet four criteria: to be discovered, recoverable, commercial and in place (from the effective date of appraisal), based on development projects.

### Reserves in oil equivalent

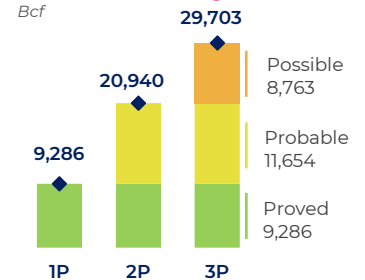


OE: Oil equivalent

### Reserves of oil



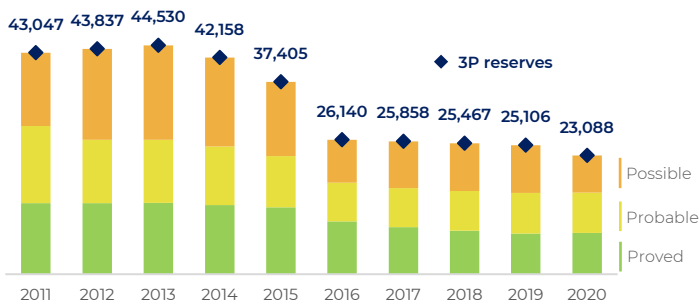
### Reserves of natural gas



## Reserves evolution

### 2011-2020 3P reserves oil equivalent

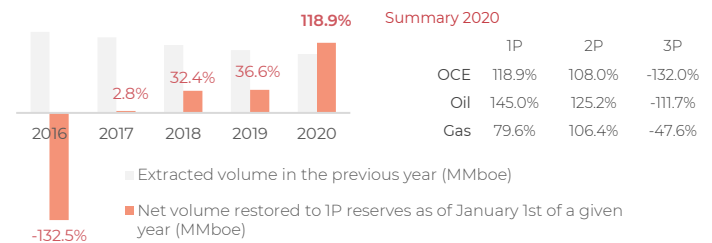
as of January 1st of a given year  
MMboe



### 1P rate of reserves replacement oil equivalent

as of January 1st of a given year

Percentage of the produced hydrocarbons' volume for each year that is replaced by the incorporation of discoveries, development and reserves updates.

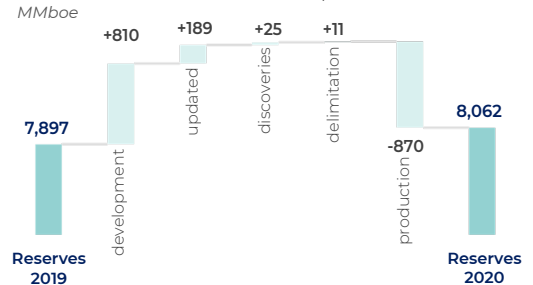


### 2019-2020 reserves' balance

as of January 1st of a given year

	Oil equivalent			Oil			Natural gas		
	1P	2P	3P	1P	2P	3P	1P	2P	3P
2019 Reserves	7,897	15,836	25,106	6,066	11,945	19,047	9,654	20,824	32,368
Development	810	400	289	720	365	258	484	162	112
Updated	189	493	-1,397	170	401	-907	836	1,592	-978
Discoveries	25	63	82	10	24	29	70	183	245
Delimitation	11	-17	-123	6	-9	-75	46	-16	-238
Production	-870	-870	-870	-624	-624	-624	-1,805	-1,805	-1,805
2020 Reserves	8,062	15,905	23,088	6,347	12,102	17,726	9,286	20,940	29,703

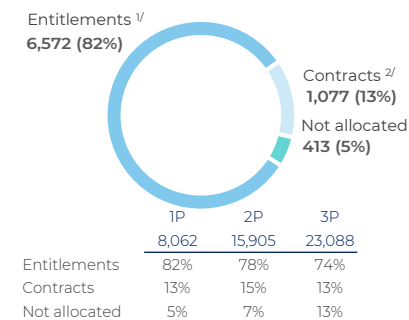
### 2019-2020 1P reserves balance in oil equivalent



## Reserves distribution

### 2020 1P reserves in oil equivalent

as of January 1st 2020  
MMboe



<sup>1/</sup> Includes reserved entitlements

<sup>2/</sup> From bidding processes, farmouts and migrations

### Top 5: 1P reserves by field

as of January 1st 2020

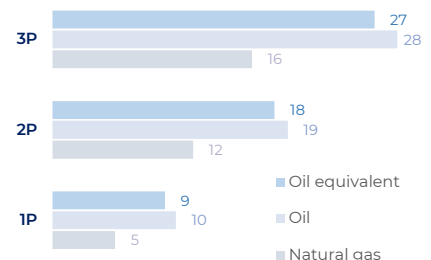
Reserves oil	Field	1P reserves
oil	AYATSIL	1,148
oil	MALOOB	887
oil	AKAL	513
oil	ZAAP	386
oil	BALAM	185

Reserves natural gas	Field	1P reserves
natural gas	IXACHI	1,145
natural gas	AKAL	686
natural gas	LAKACH	342
natural gas	MALOOB	336
natural gas	ZAAP	279

### Reserves to production ratio

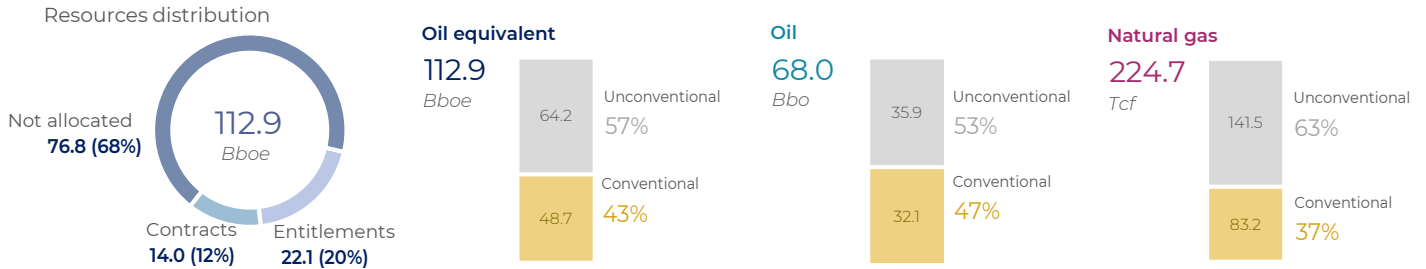
Average number of years in which the reserves may be depleted as of January 1, 2020 assuming a constant production rate equal to that observed in 2019.



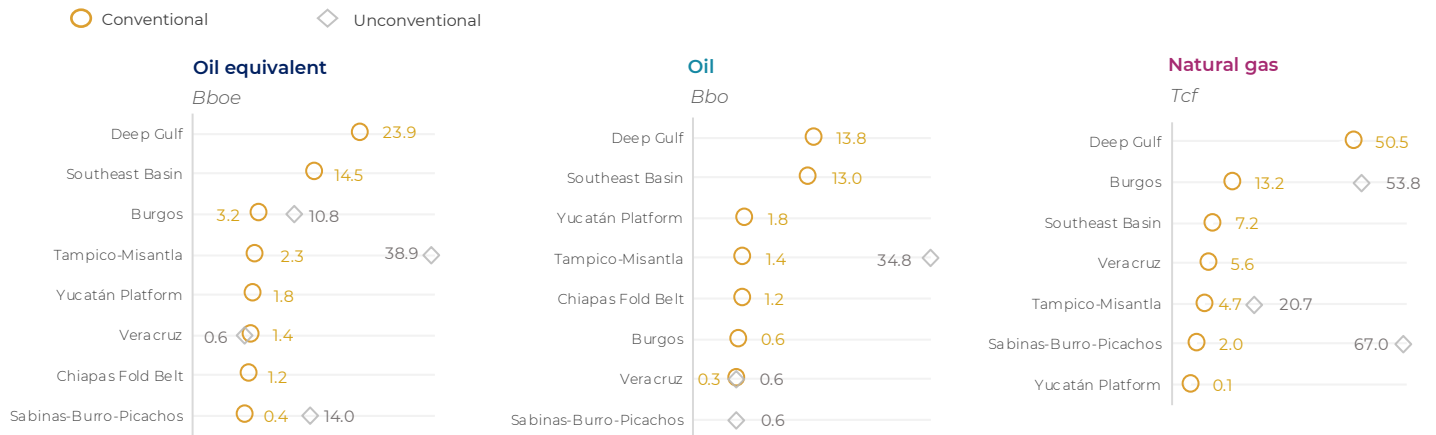
## Prospective resources as of October 2019

### Prospective resources

Estimated volume of hydrocarbons as of a given date, corresponding to undiscovered accumulations where existence is inferred based on available information and estimated as potentially recoverable through the application of future exploration and development projects.



## Resources by oil province



## Unconventional prospective resources

	Crude oil equivalent Bboe	Oil Bbo	Wet natural gas Tcf	Dry natural gas Tcf
<b>Burgos</b>	10.8		9.5	44.3
Upper cretaceous	1.9		9.5	
Upper jurassic tithonian	8.9			44.3
<b>Sabinas - Burro - Picachos</b>	14.0	0.6	6.6	60.4
Upper cretaceous	7.1	0.6	6.6	26.3
Upper jurassic tithonian	6.8			34.1
<b>Tampico-Misantla</b>	38.9	34.8	20.7	
Upper cretaceous	14.5	13.0	7.6	
Upper jurassic oxfordian	4.0	4.0		
Upper jurassic tithonian	20.4	17.8	13.1	
<b>Veracruz</b>	0.6	0.6		
Upper cretaceous	0.6	0.6		



Oil province

Refer to the Hydrocarbons Information System: <https://sih.hidrocarburos.gob.mx/>

Totals may not add up precisely due to rounding.

The definitions provided by this report followed the guidelines for quantification procedures and the nation's reserves certification. CNH adopted the Petroleum Management System, in its current English version as a reference methodology for the estimation and reserves consolidation.

**MMBoe:** millions (10<sup>6</sup>) of barrel of crude oil equivalent.  
**Bboe:** millions (10<sup>9</sup>) of barrel of crude oil equivalent.

**MMBo:** millions (10<sup>6</sup>) of barrels of oil.  
**Bbo:** billions (10<sup>9</sup>) barrels of oil.

**Bcf:** billions (10<sup>9</sup>) of cubic feet.  
**Tcf:** trillions (10<sup>12</sup>) of cubic feet.