



Comisión Nacional  
de Hidrocarburos

# Digital tool for petroleum project evaluation using UNFC

**Eduardo Simón Burgos**

Application of UNFC to Petroleum Total Resource Management: Status and Outlook

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# Digital Tool

## UNFC

Helps to understand and visualize different project dimensions and perspectives, as well as to identify potential barriers in project development.

An effective platform for energy policy decision-making and regulatory actions.



## Pilot Project

Results and lessons learned

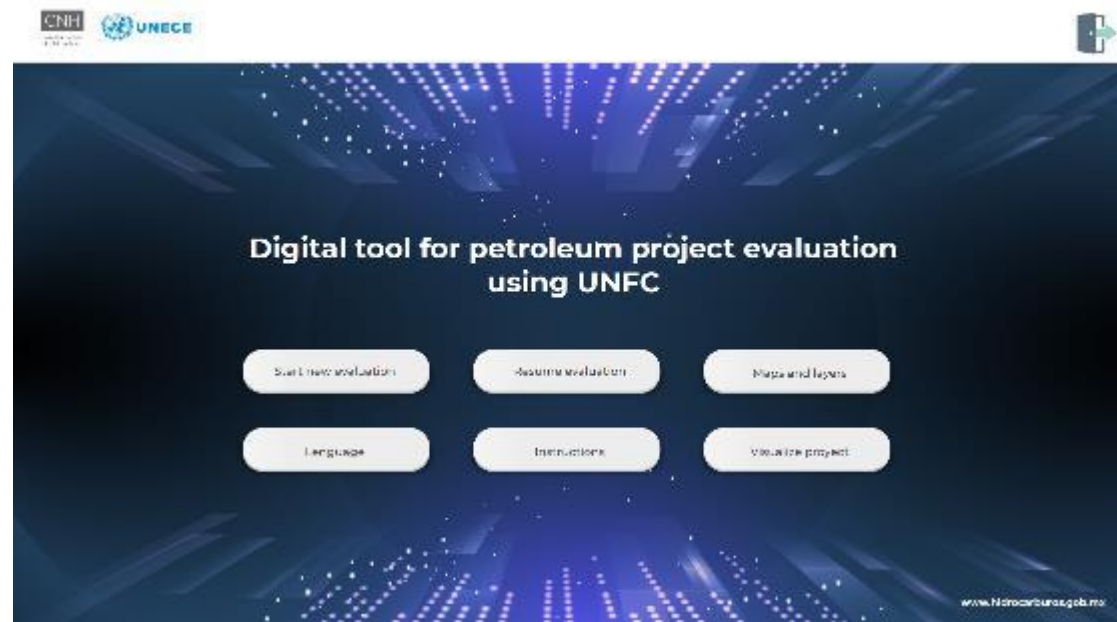
Tools created



## Gradual implementation

Speed up the evaluation and classification of projects.

Include stakeholders in assessment process.



# E axis evaluation

## E Axis - Environment

Project description | E Axis - Environment | E Axis - Social | E Axis - Legal

E Axis - Economic | F Axis | C Axis | Evaluation

ENVIRONMENTAL VARIABLES	HIGH (MOST LIKELY)	MED (LIKELY)	LOW (UNLIKELY)
Is the Project in a restricted area?	Yes	Partially	No
Is the Project in a protected area?			
Is the Project in a Sensitive Zone?			
Is the Project in a Restricted Area in the NOM-000-BEH-2010?	Partially	Yes	No
Is there a critical ecological sensitive area?	Yes	Partially	No

Legend:
 

- UMBRALANT
- PROYECTO
- ZONAS SENSIBLES

INEGI

## E Axis - Economic

Project description | E Axis - Environment | E Axis - Social | E Axis - Legal

E Axis - Economic | F Axis | C Axis | Evaluation

with indicator

Indicator	Value	Unit	Weight
Number of employees			
Investment		MX	
Production		MX	
Value added		MX	
Capital		MX	
Energy		MX	
Water		MX	
Land		MX	
Infrastructure		MX	
Other			

with indicator

Indicator	Value	Unit	Weight
Number of employees			
Investment		MX	
Production		MX	
Value added		MX	
Capital		MX	
Energy		MX	
Water		MX	
Land		MX	
Infrastructure		MX	
Other			

Note:

Evaluation of the social and environmental aspects through the use and layering of shapefiles.

Economic evaluation through an automatic valuation with most common indicators.

# F and G axes evaluation

## F Axis

Project description   E Axis - Environment   E Axis - Social   E Axis - Legal  
E Axis - Economic   F Axis   G Axis   Evaluation

Analyze project

- Is there current production?
  - Yes  
F1.1
  - No
- Is there a development plan?
  - Yes
    - Has it been approved?
      - Yes
      - No
        - Is it in the process of approval?
          - Yes
            - Is it a matter of time?
              - Yes  
F1.5F2
              - No
            - No, it was rejected
    - No

\* Double click to select classification

Empty table with columns for 'L1' and 'L2'.

## G Axis

Project description   E Axis - Environment   E Axis - Social   E Axis - Legal  
E Axis - Economic   F Axis   G Axis   Evaluation

Reserves

Reserves	Quantity	Unit
Oil	10	MMbbl
Gas	100	MMm3
Condensate	10	MMbbl
Other	10	MMbbl

Thematic reserves

Thematic reserves	Quantity	Unit
Oil	10	MMbbl
Gas	100	MMm3
Condensate	10	MMbbl
Other	10	MMbbl

Notes

Empty text area for notes.

Evaluation of the feasibility of the project through a flow diagram.

Reserves and resources estimates as input.

## Evaluation



**EVALUATION SUMMARY**

PROYECTO:

NUMERO DE: [Ejemplo de descripción de proyecto](#)

FASE:

CONDICIONES:

TIPO DE:

UBICACION:

CONDICIONES:

	F1.1	F1.2	F1.3	F2.1	F2.2	F2.3	F3.1	F3.2	F3.3	F4
E1.1										
E1.2										
E2										
E3.1										
E3.2										
E3.3										

Discovered	Reserves	On Production	
		Approved for Development	
		Justified for Development	
	Contingent Resources	Development Pending	
Development Unclassified or On Hold		On Hold	
		Unclassified	
Development Not Viable			
Unrecoverable			
Undiscovered	Prospective Resources	Prospect	
		Lead	
		Play	
	Unrecoverable		
Special Cases	Defined but not classified in PRMS		
	Less Common Mappings		

### Project Evaluation:

Final classification according to UNFC definitions.

2 visualizations:

- E vs. F
- Bridging between PRMS and UNFC-2009.

## Next Steps

- Complete beta version testing.
- Upload the tool to <https://www.gob.mx/cnh>
- Open access to the tool.
- Evaluate more blocks using the tool.
- Modify the tool to evaluate any energy project.
- Translate into other languages.



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