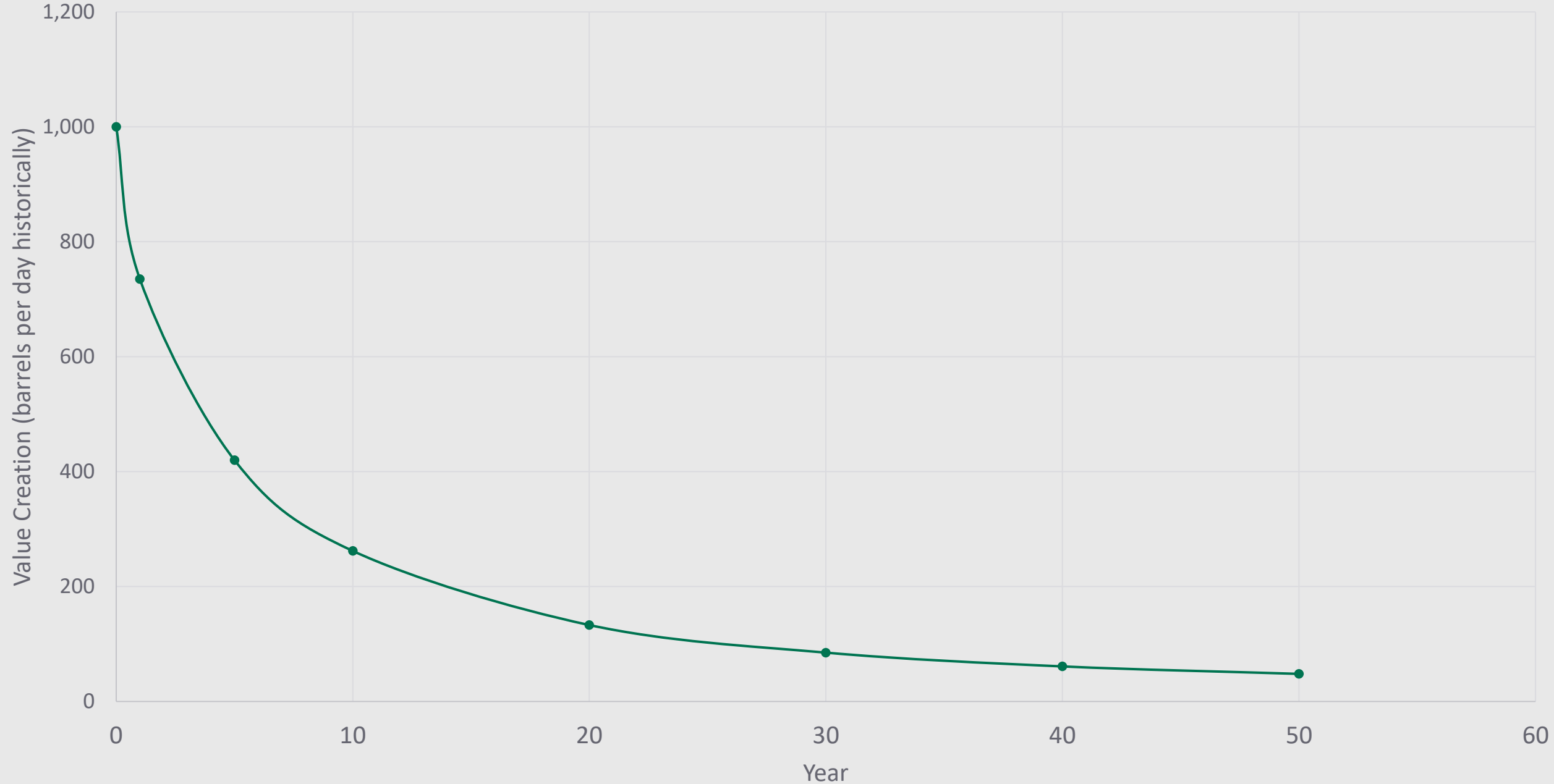




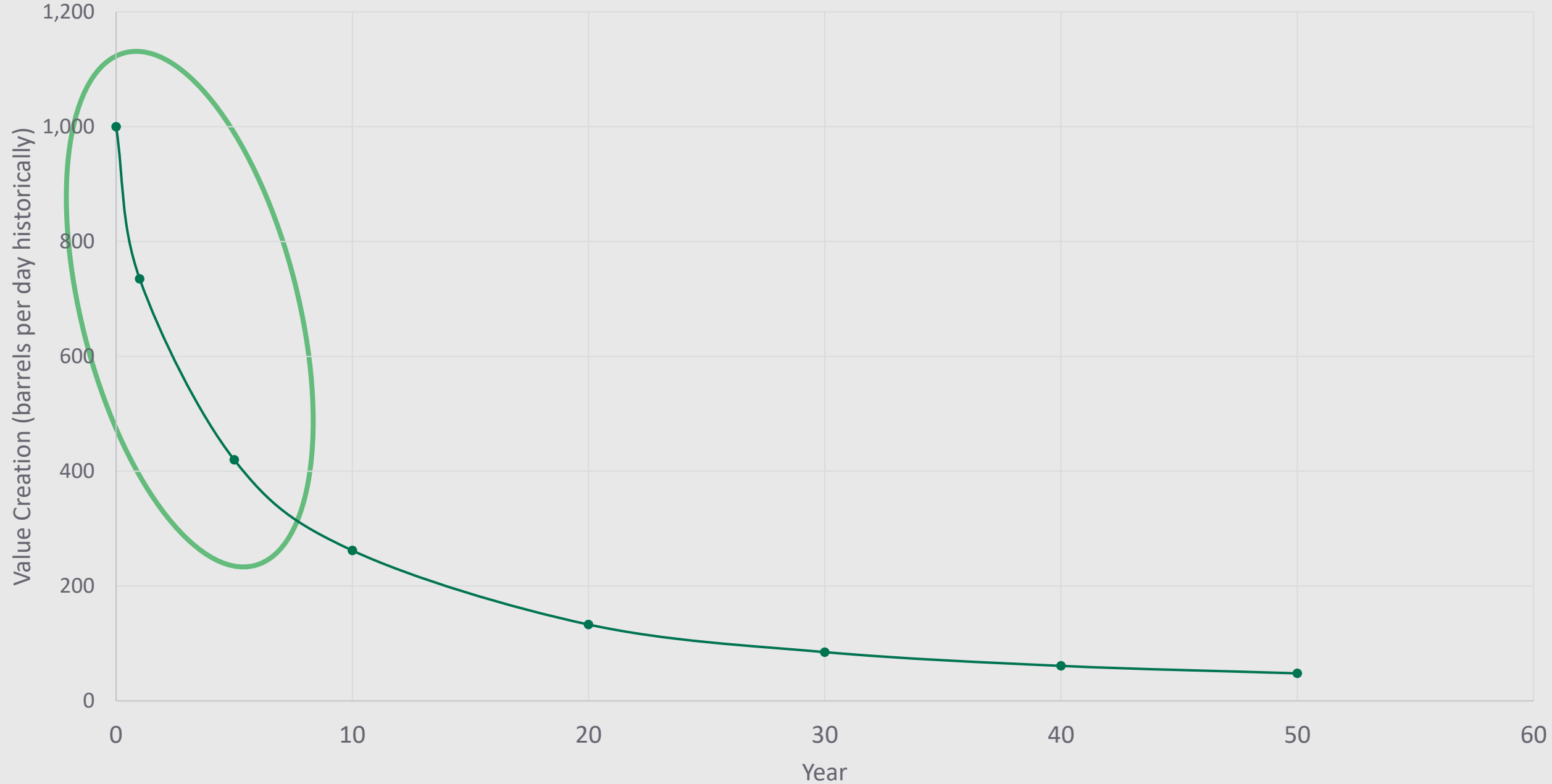
# 100 YEAR PARADIGM



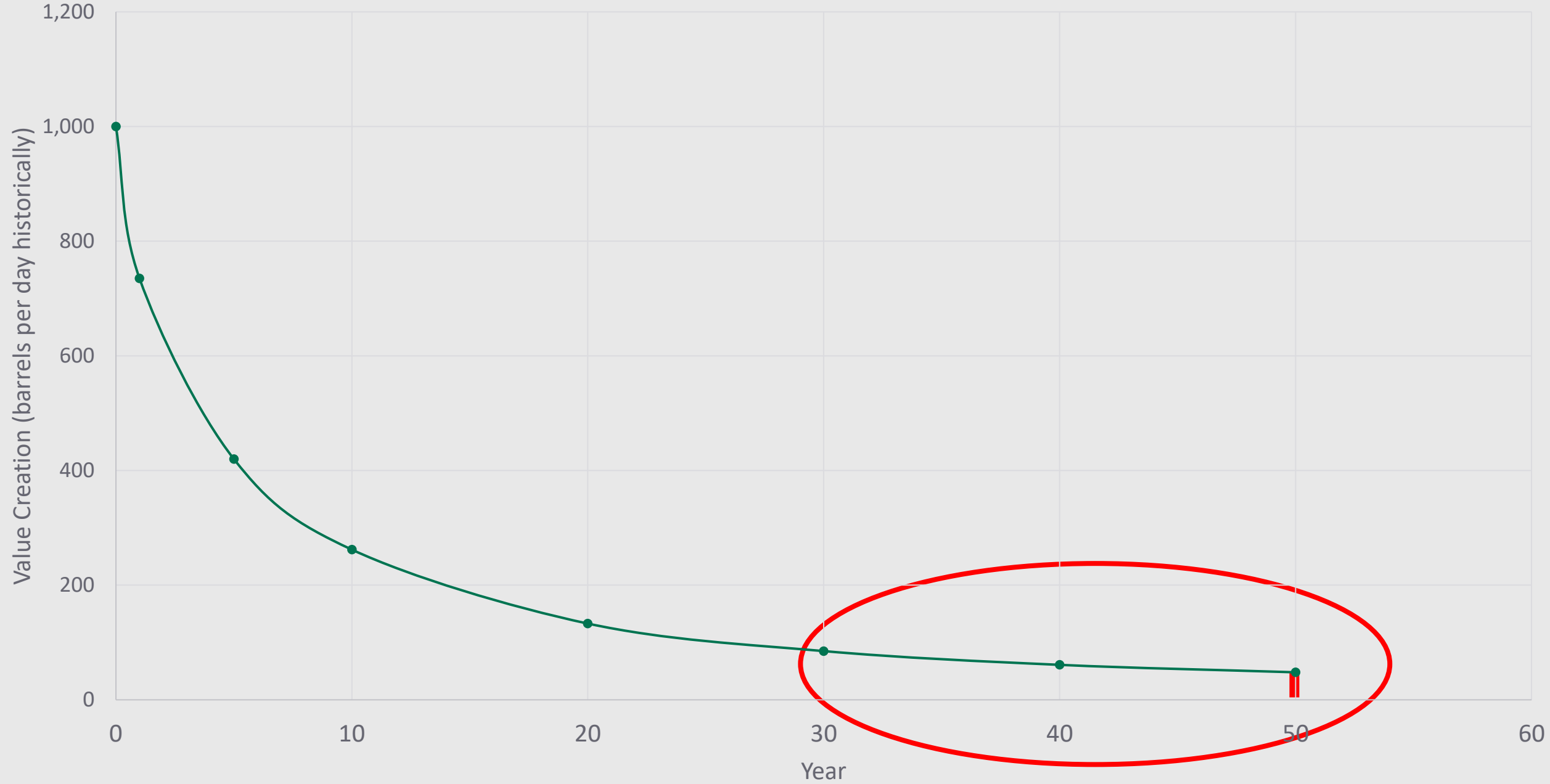
# Value Creation per well vs. Time



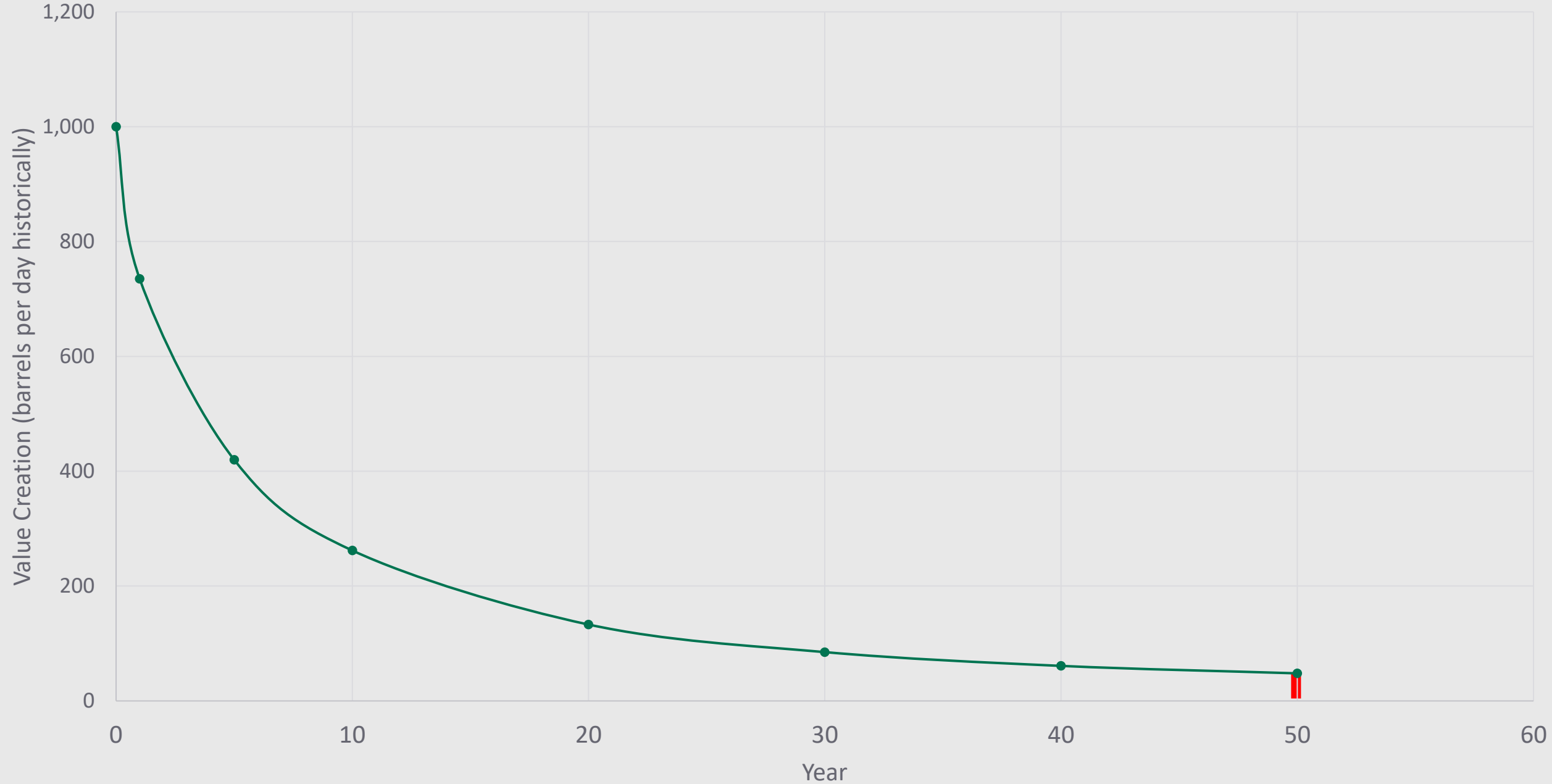
# Value Creation per well vs. Time



# Value Creation per well vs. Time



# Value Creation per well vs. Time









# REPURPOSEMENT

## AKA

— **PLUG AND *ADVANCEMENT***



## Why repurpose an idle well?

P&A

**Cost  
Savings**

Repurpose





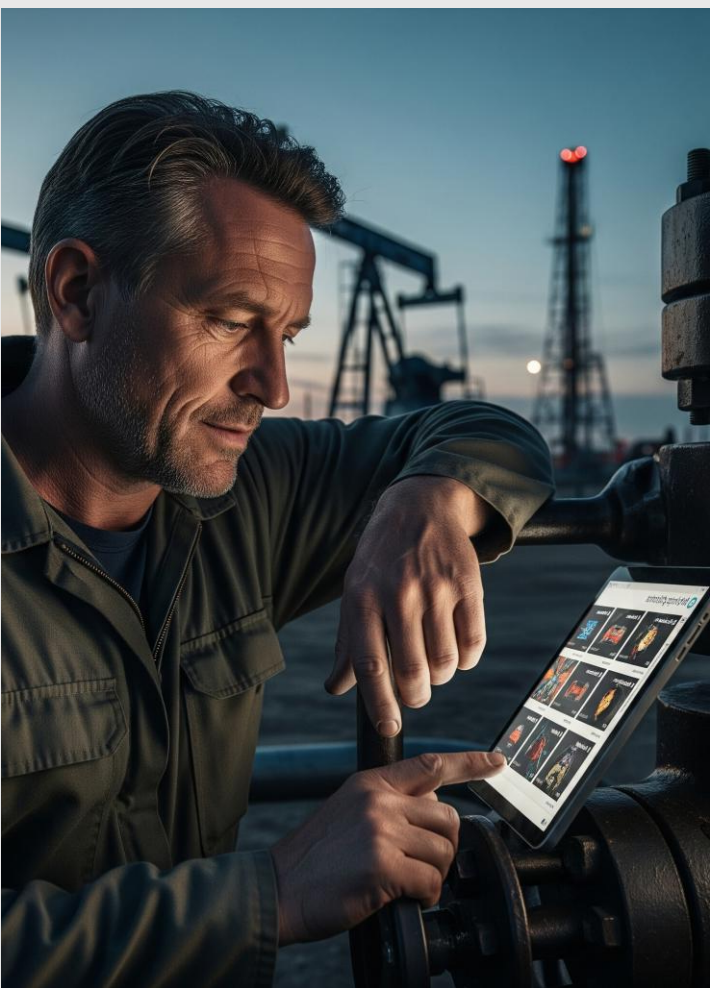
## Preserve Optionality

Predicting oil prices is nearly impossible.

Predicting the future needs of humanity... Good luck!

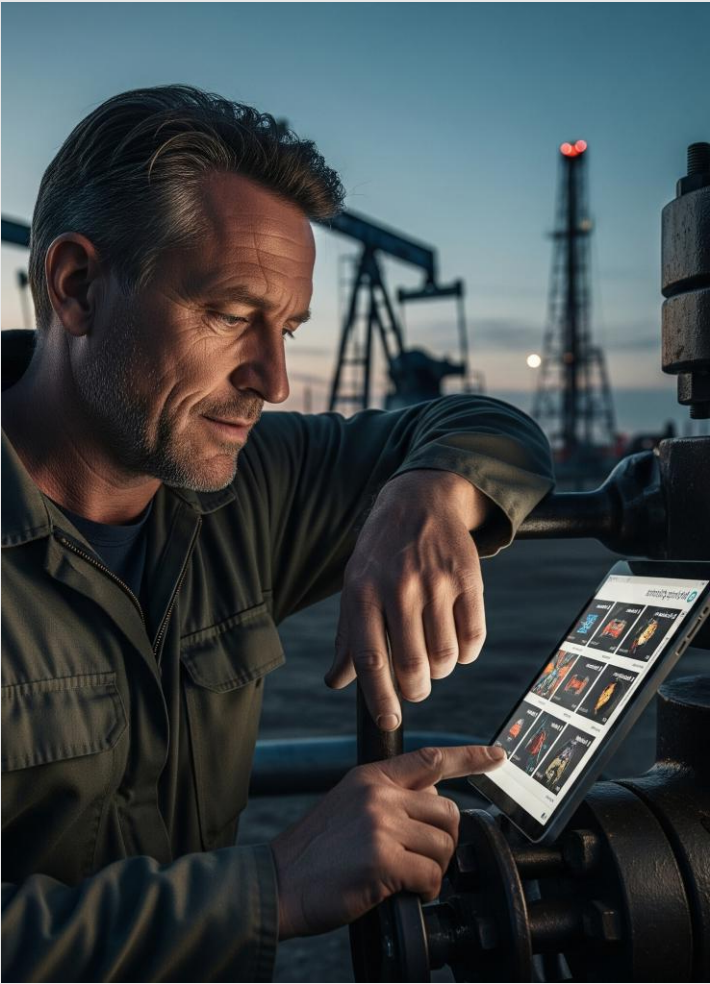


# Options already on the Horizon



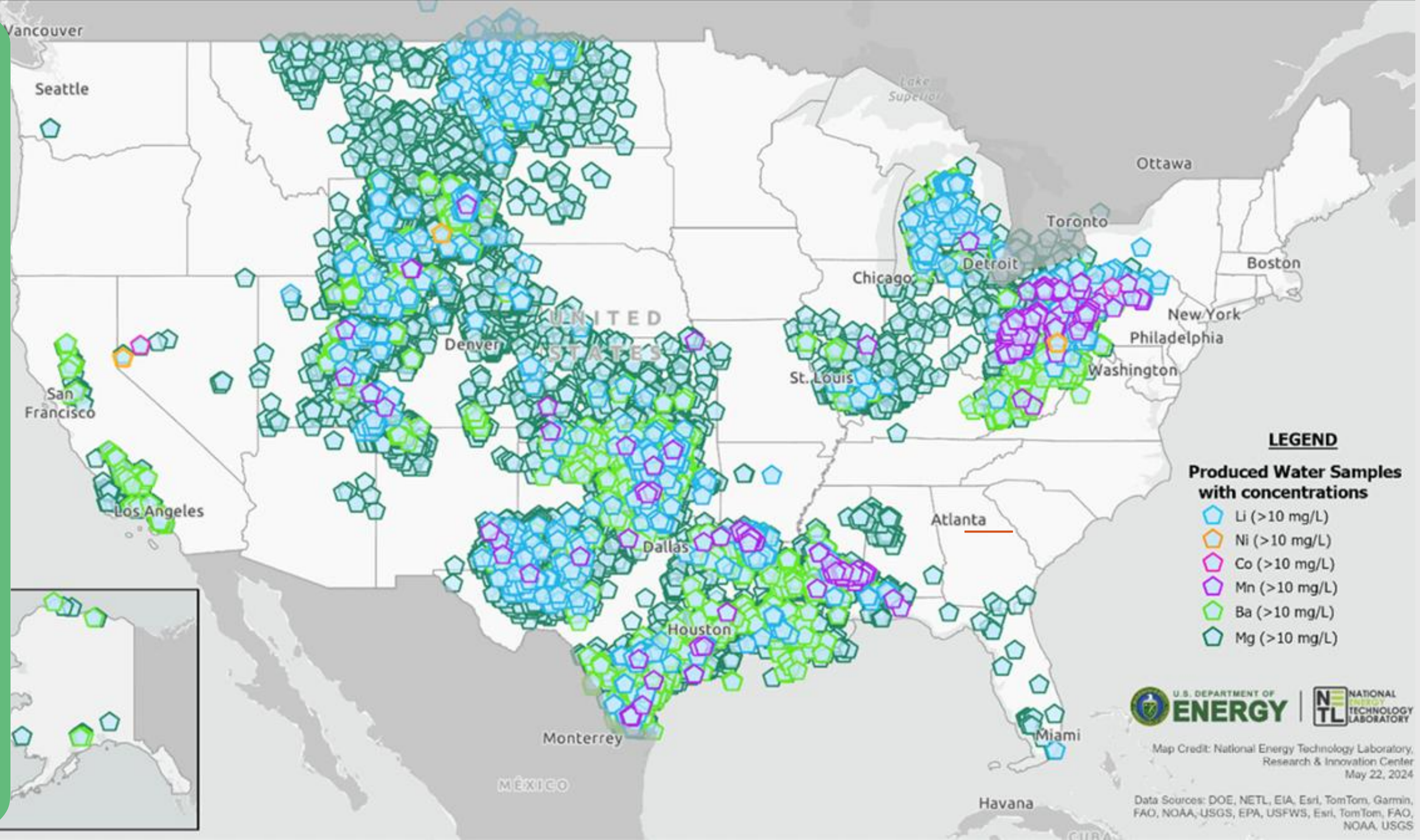
Option	Companies/Universities	
	<u>Heard of</u>	<u>Met</u>
RTP	100's	6
Geothermal	5	2
Gravity Energy Storage	1	1
Thermal Energy Storage	3	2
Compressed Air Energy Storage	2	2
Critical Mineral / Precious Metal Extraction	4	4
CCUS	80+	6
The idea I haven't heard of yet	...	...

# Options already on the Horizon

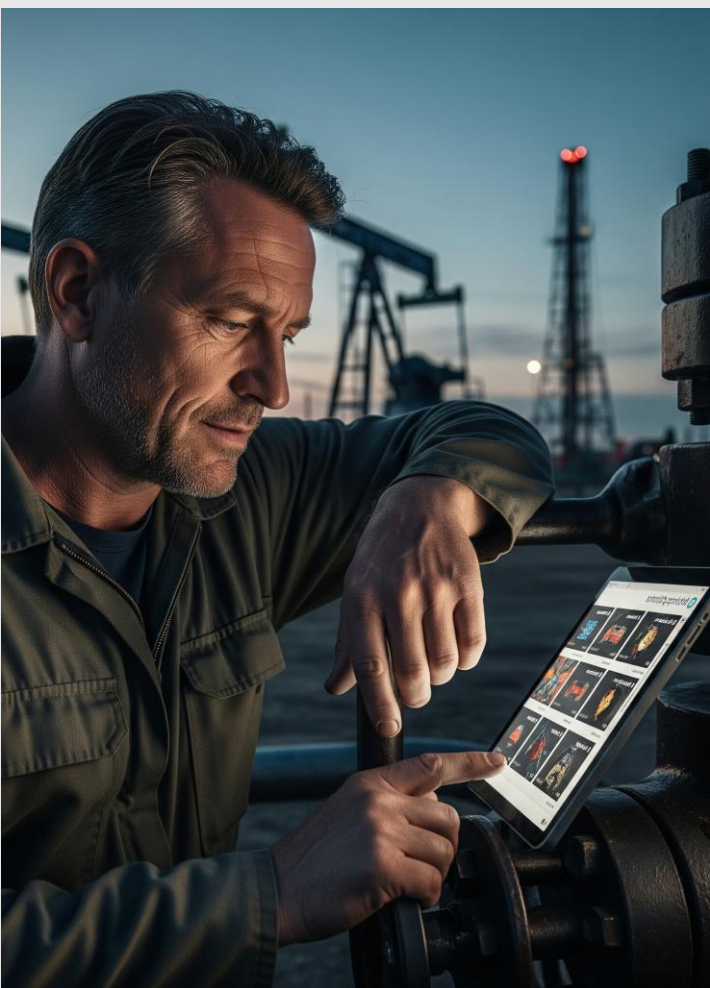


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# Options already on the Horizon



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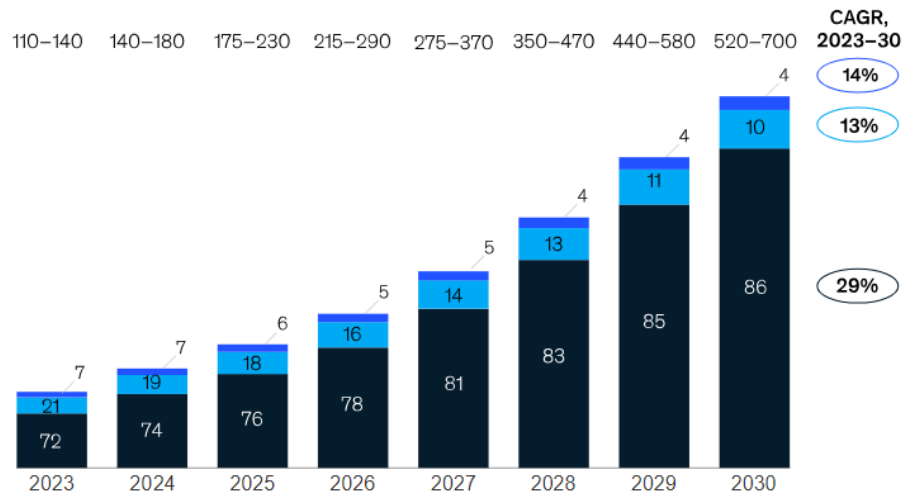
# Energy storage capacity will 5X by 2030

Battery energy storage system capacity is likely to quintuple between now and 2030.

Annual added battery energy storage system (BESS) capacity, %

■ Utility ■ Commercial and industrial ■ Residential

100% in  
GWh =



CAGR,  
2023-30

14%

13%

29%

Market size, \$ billion

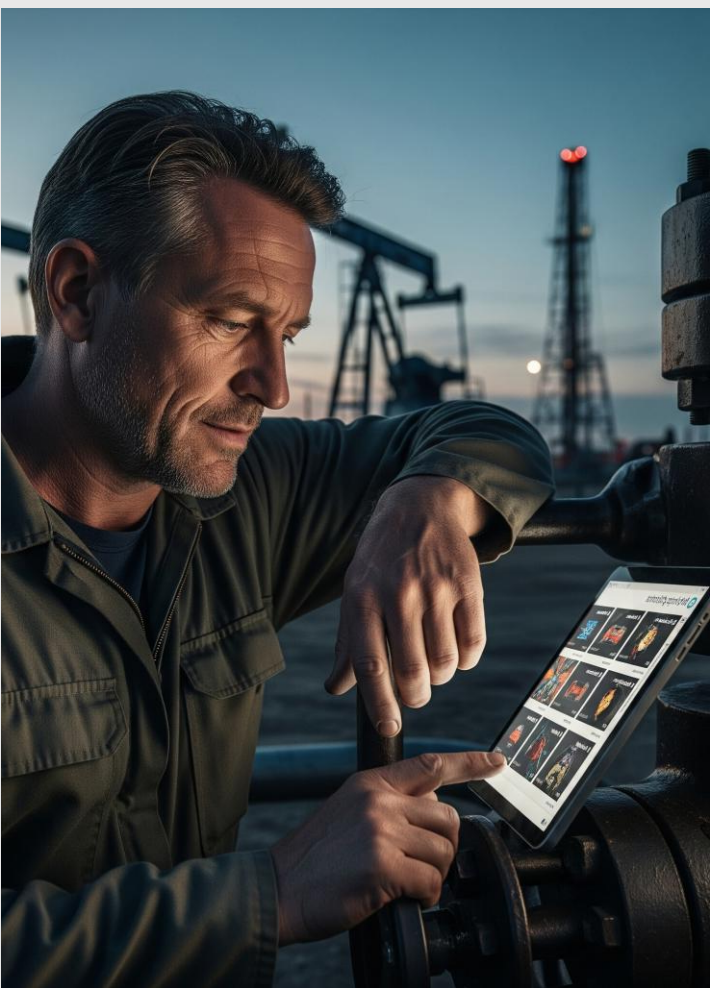
Note: Figures may not sum to 100%, because of rounding.  
Source: McKinsey Energy Storage Insights BESS market model

McKinsey & Company

- Energy storage capacity is increasing because the value of energy storage strong and expected to grow.
- Another reason why the P&A timeline for a energy storage conversion is decades away.



# Options already on the Horizon

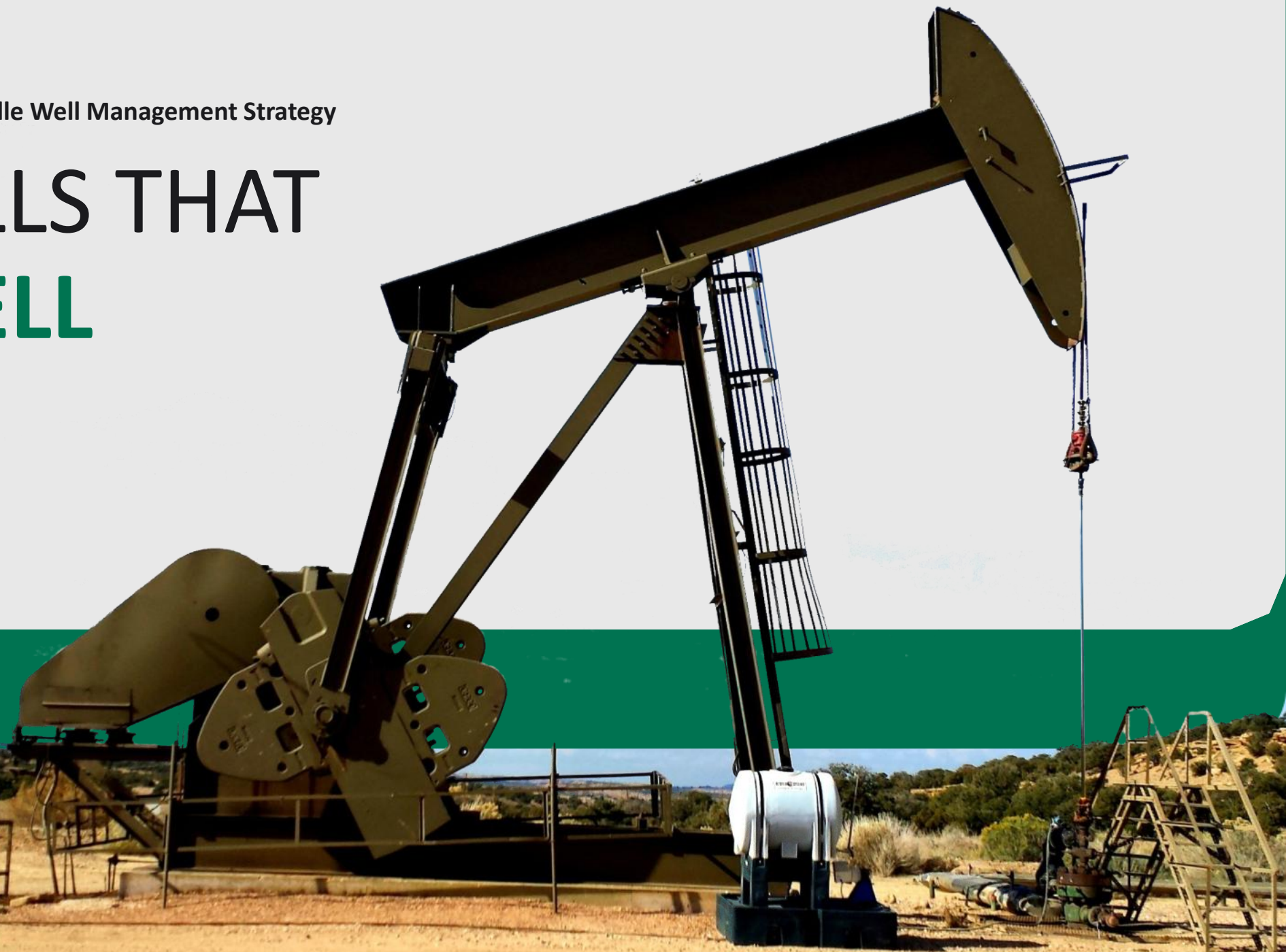


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Energy Storage is the new Idle Well Management Strategy

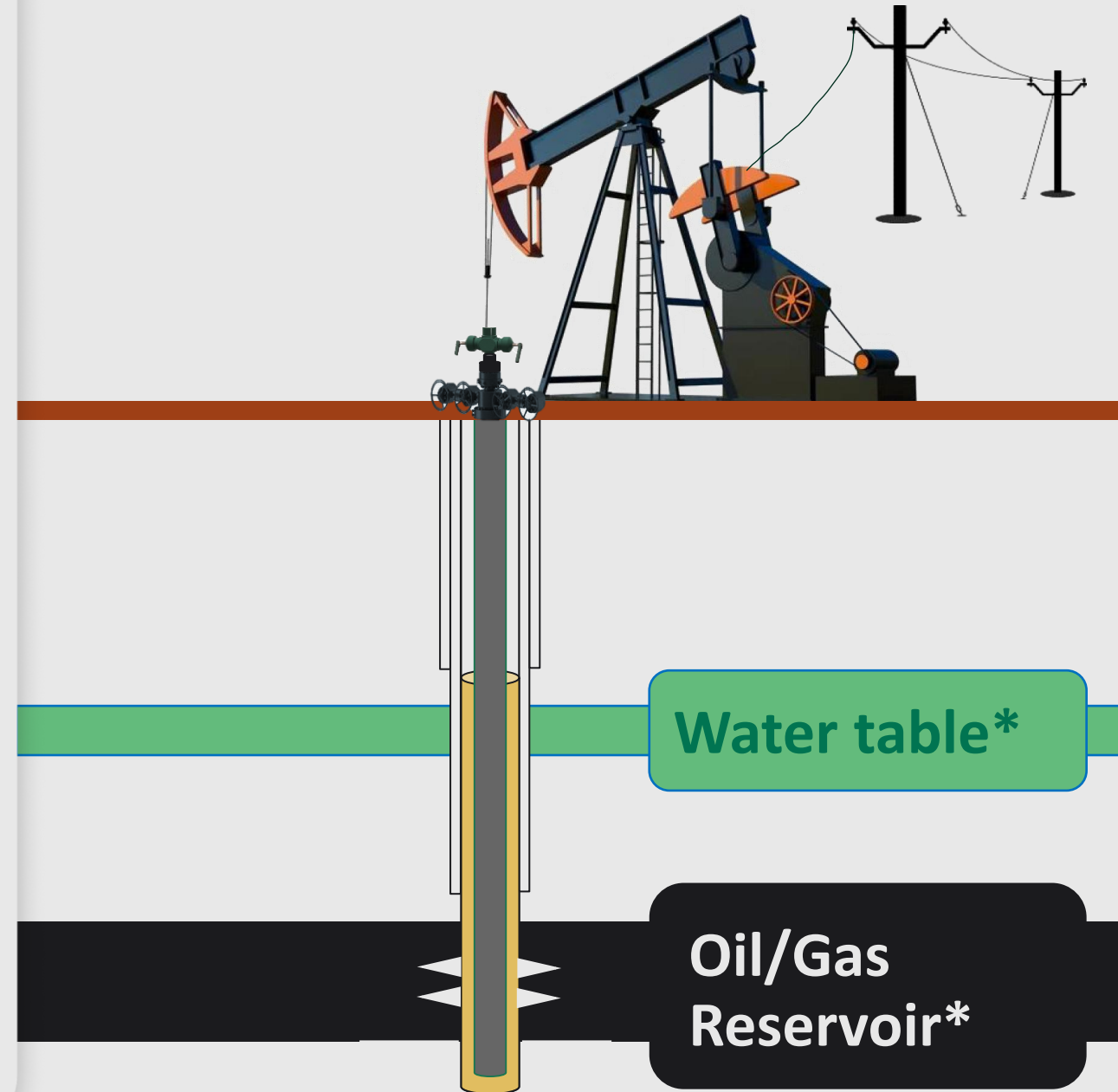
# OIL WELLS THAT END WELL



## Gravity Well: 2-in-1 Solution

A Gravity Well is a plugged, monitored, and secured idle well ready to serve as a mechanical battery for 30+ years.

This is how the conversion works...

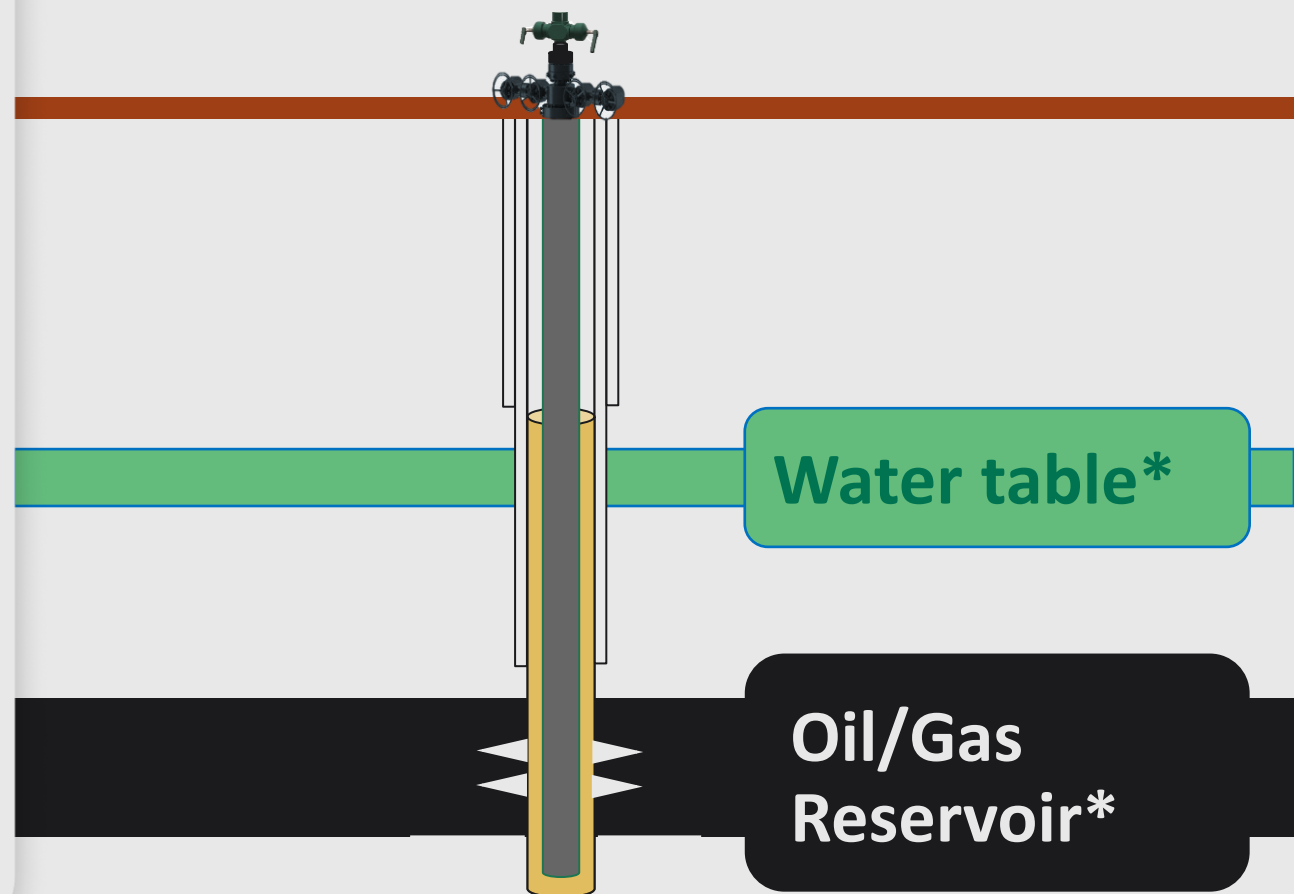
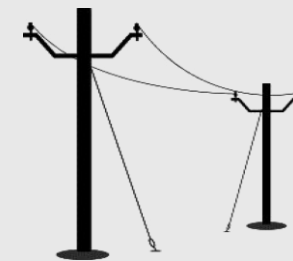


\*not to scale

## Gravity Well: 2-in-1 Solution

Process to convert an idle well to a Gravity Well:

1. Remove legacy material & well prep
  - i. Surface equipment removal

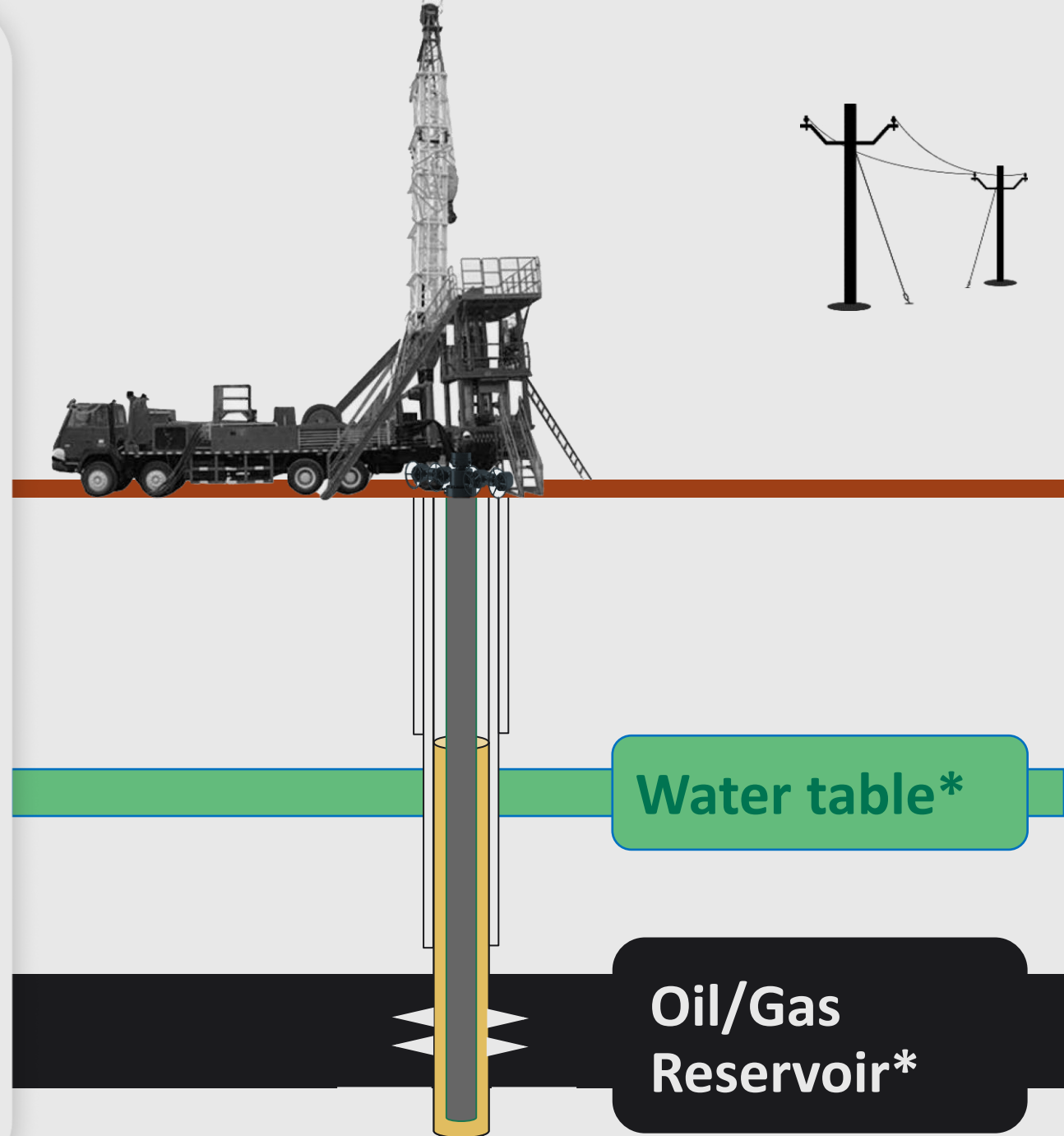


\*not to scale

# Gravity Well: 2-in-1 Solution

Process to convert an idle well to a Gravity Well:

1. Remove legacy material & well prep
  - i. Surface equipment removal
  - ii. Use workover rig to:

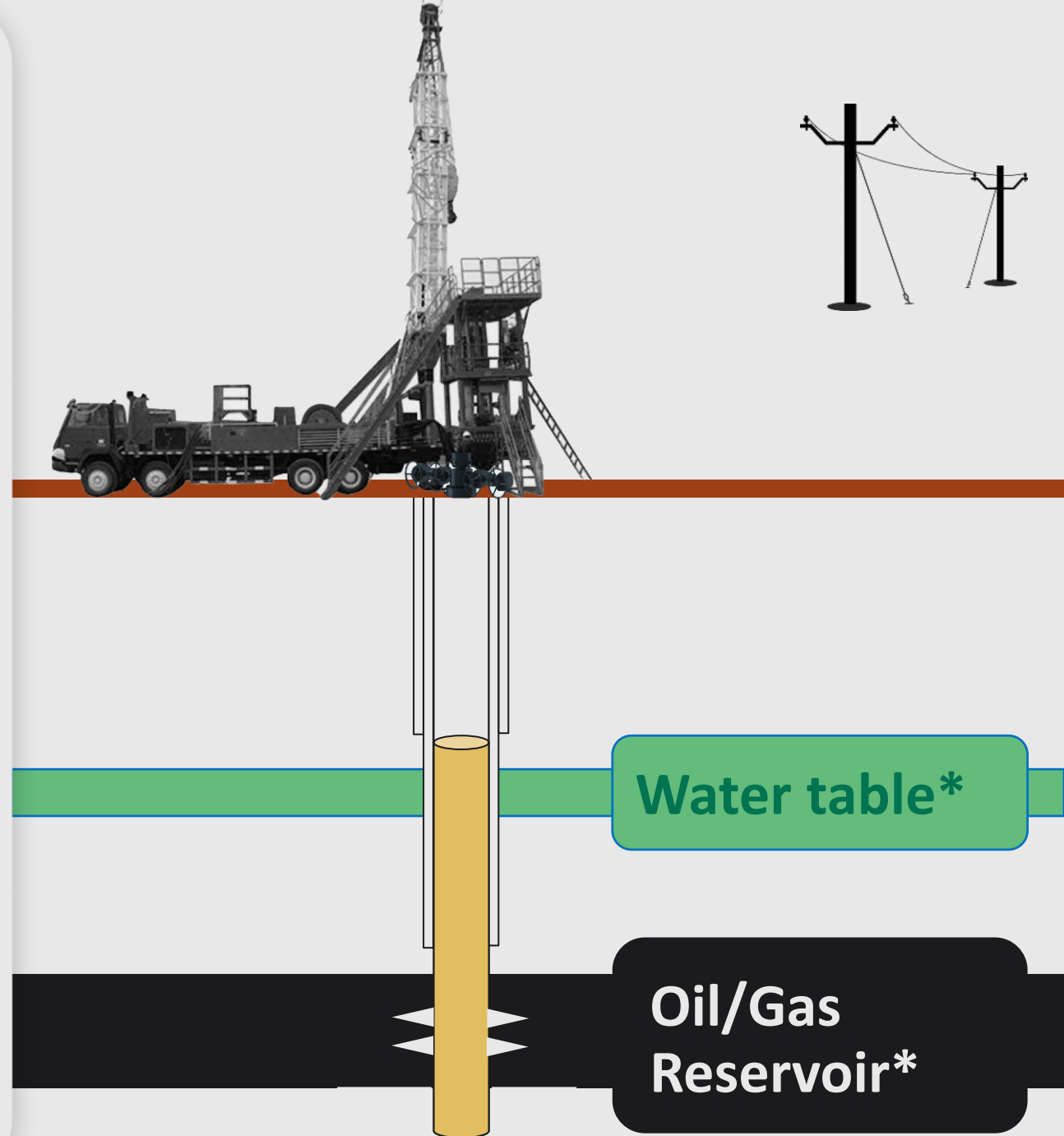




# Gravity Well: 2-in-1 Solution

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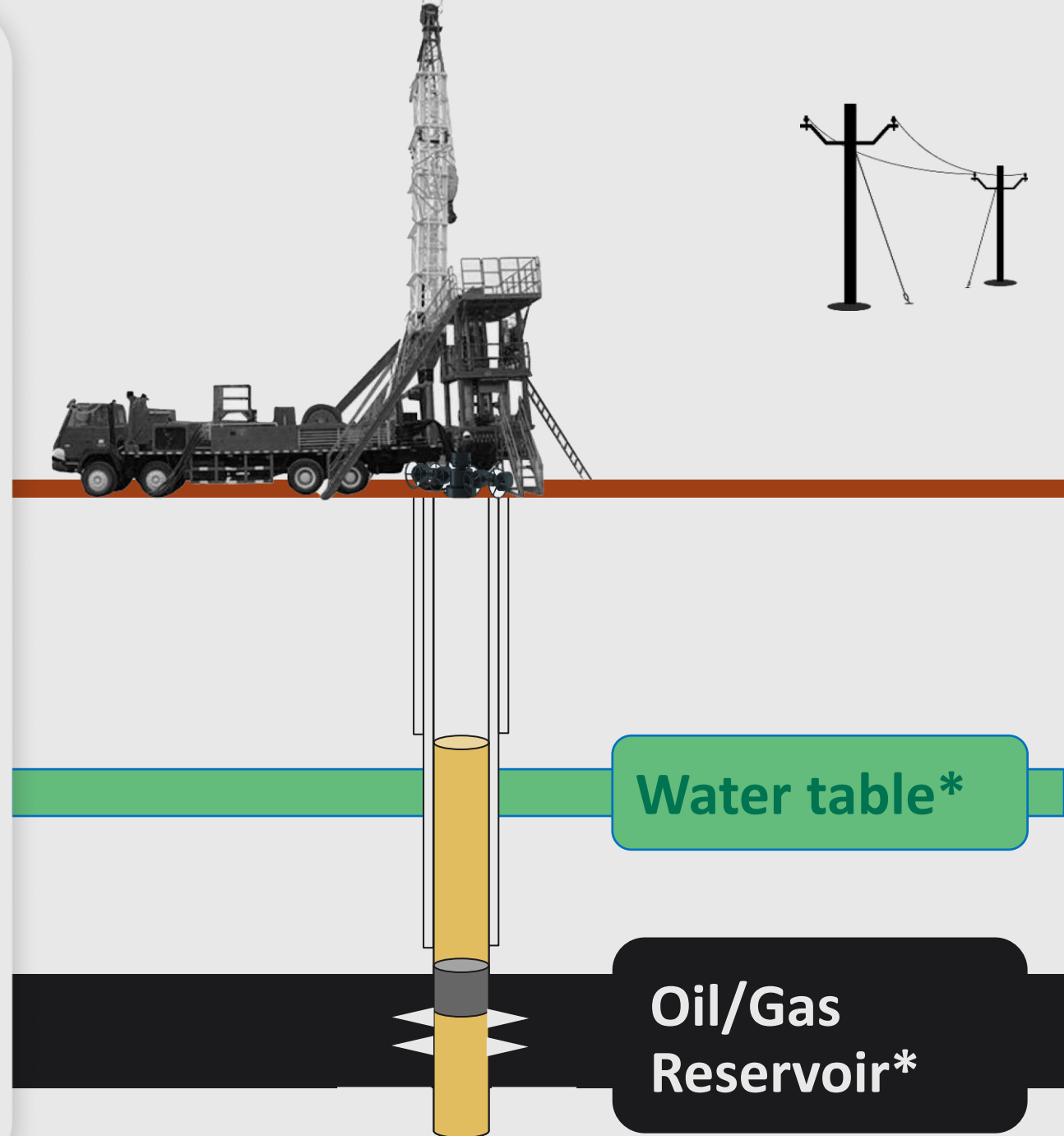
1. Remove legacy material & well prep
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    - i. Remove tubing/rods from the well



# Gravity Well: 2-in-1 Solution

Process to convert an idle well to a Gravity Well:

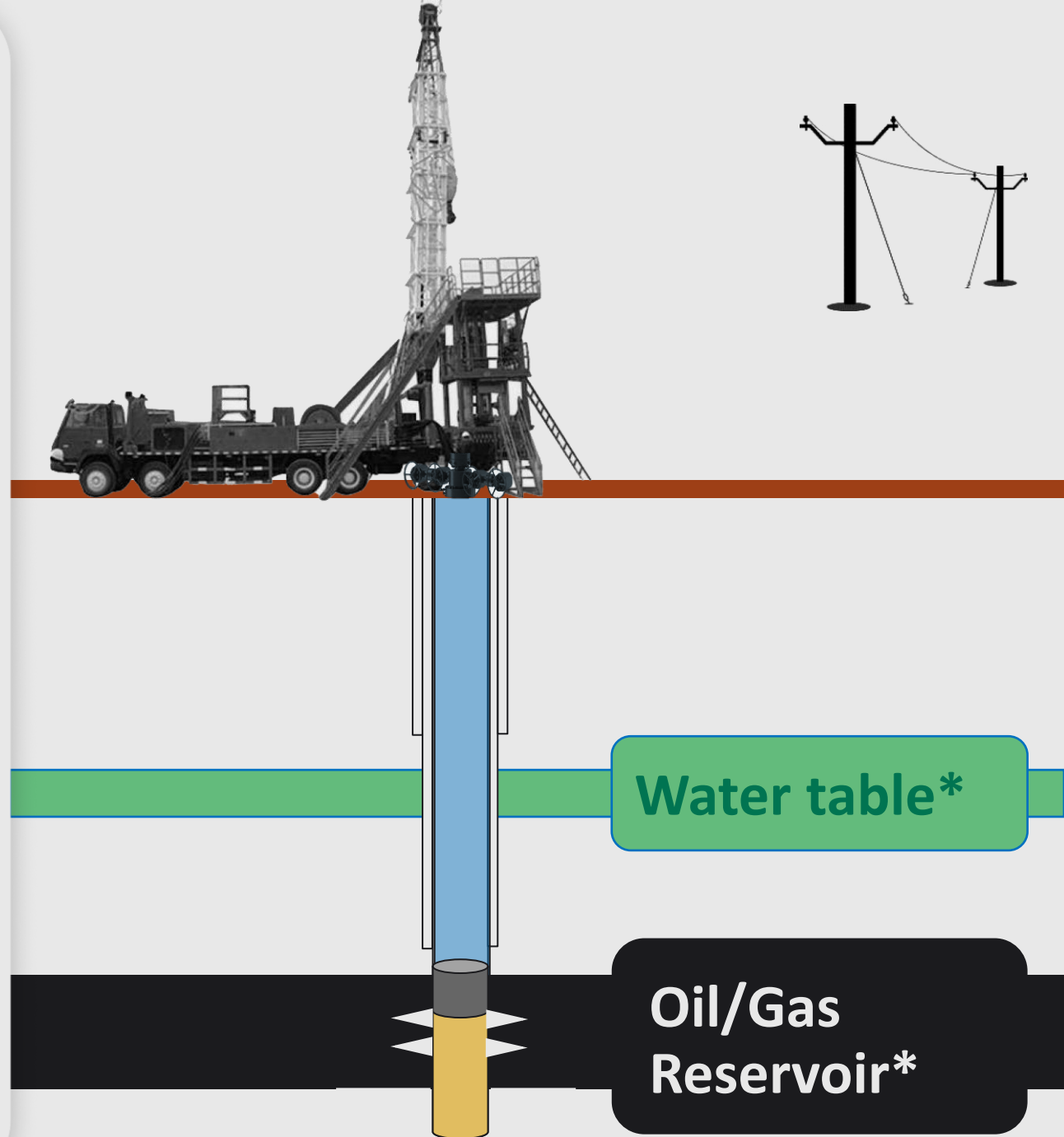
1. Remove legacy material & well prep
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  - ii. Use workover rig to:
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    - ii. Install a bridge plug above the shallowest perforation



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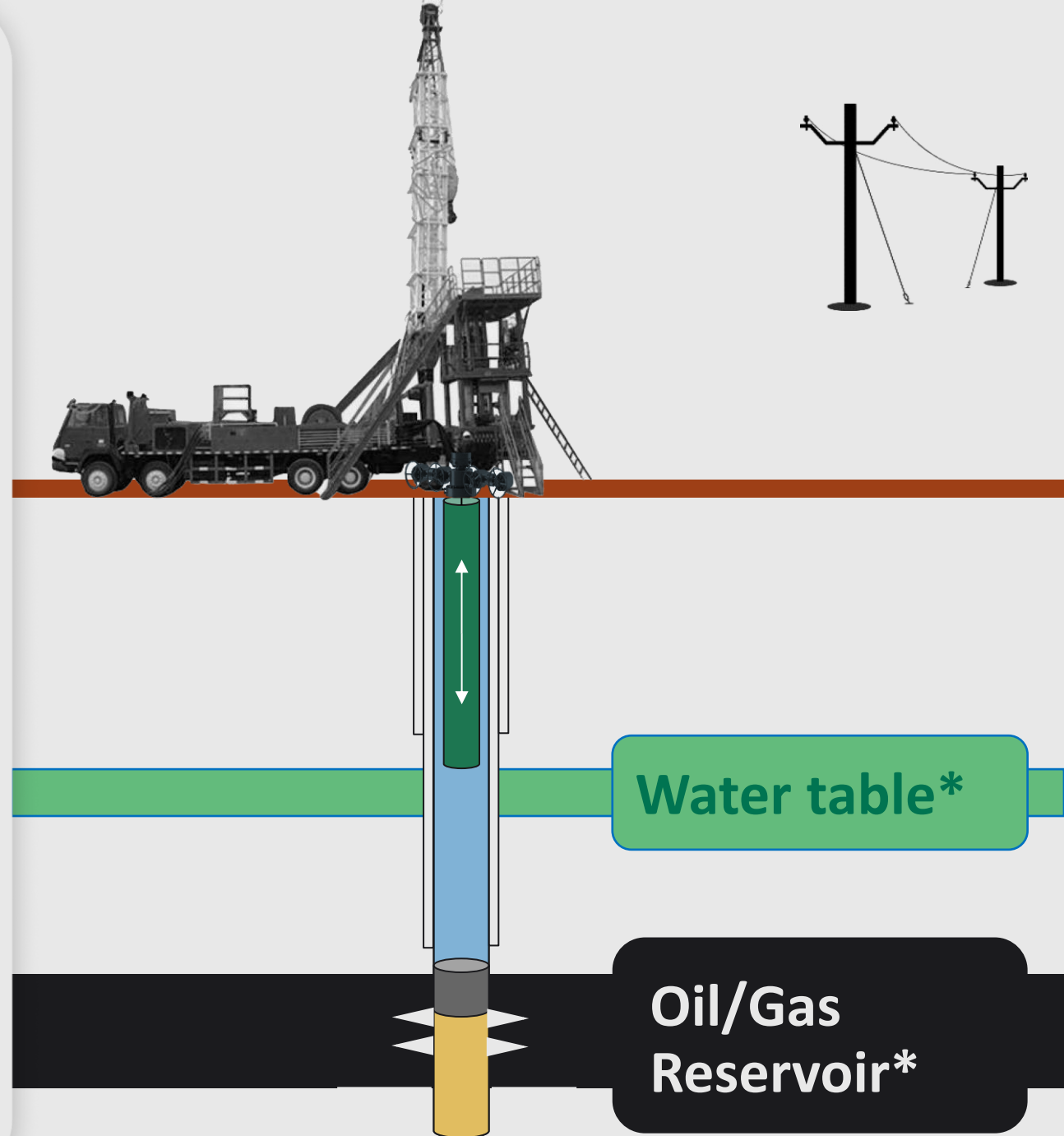
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    - iii. Run scraper and flush the well with packer fluid



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    - iii. Run scraper and flush the well with packer fluid
2. Use the workover rig to install the weight



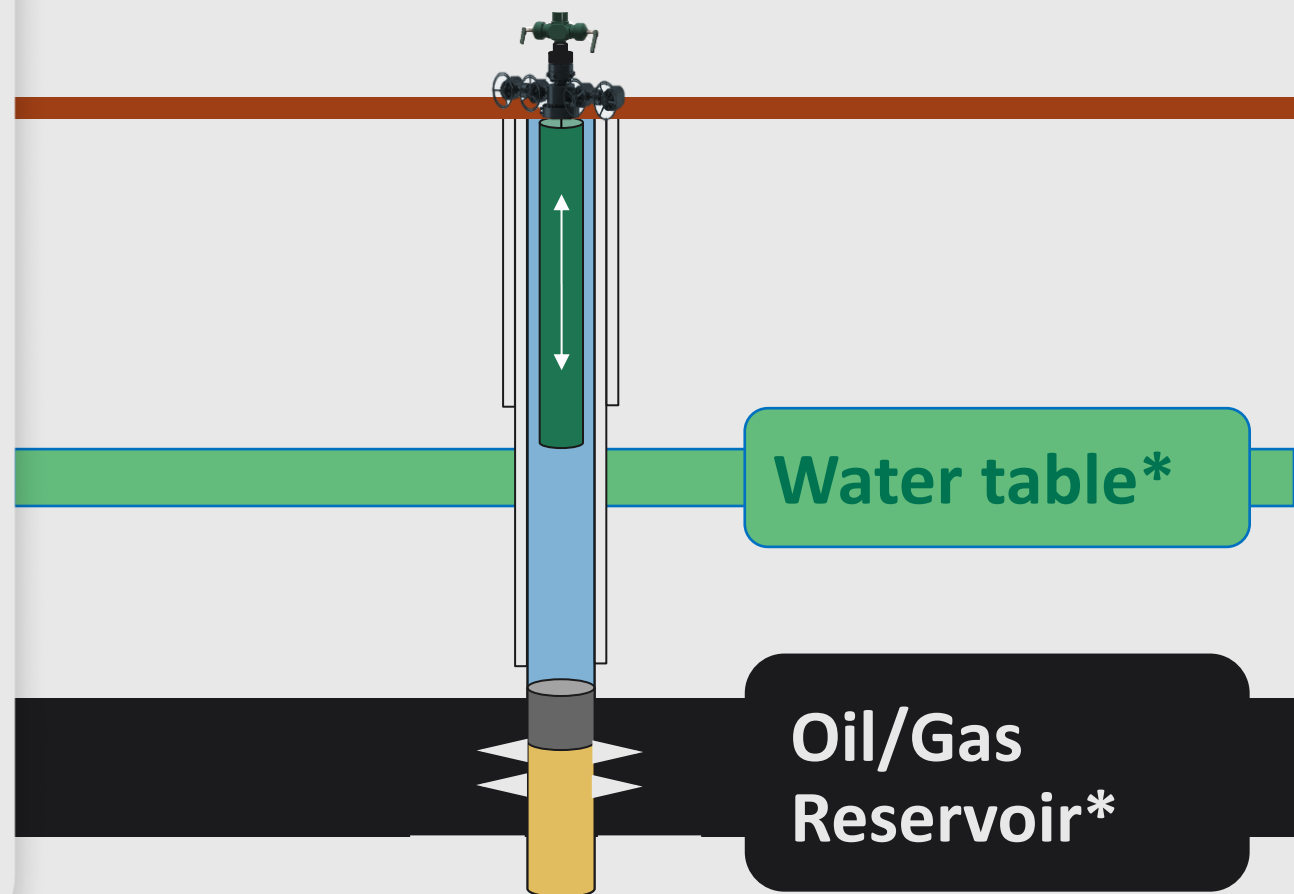
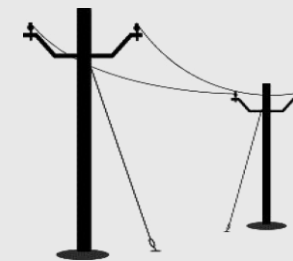
\*not to scale



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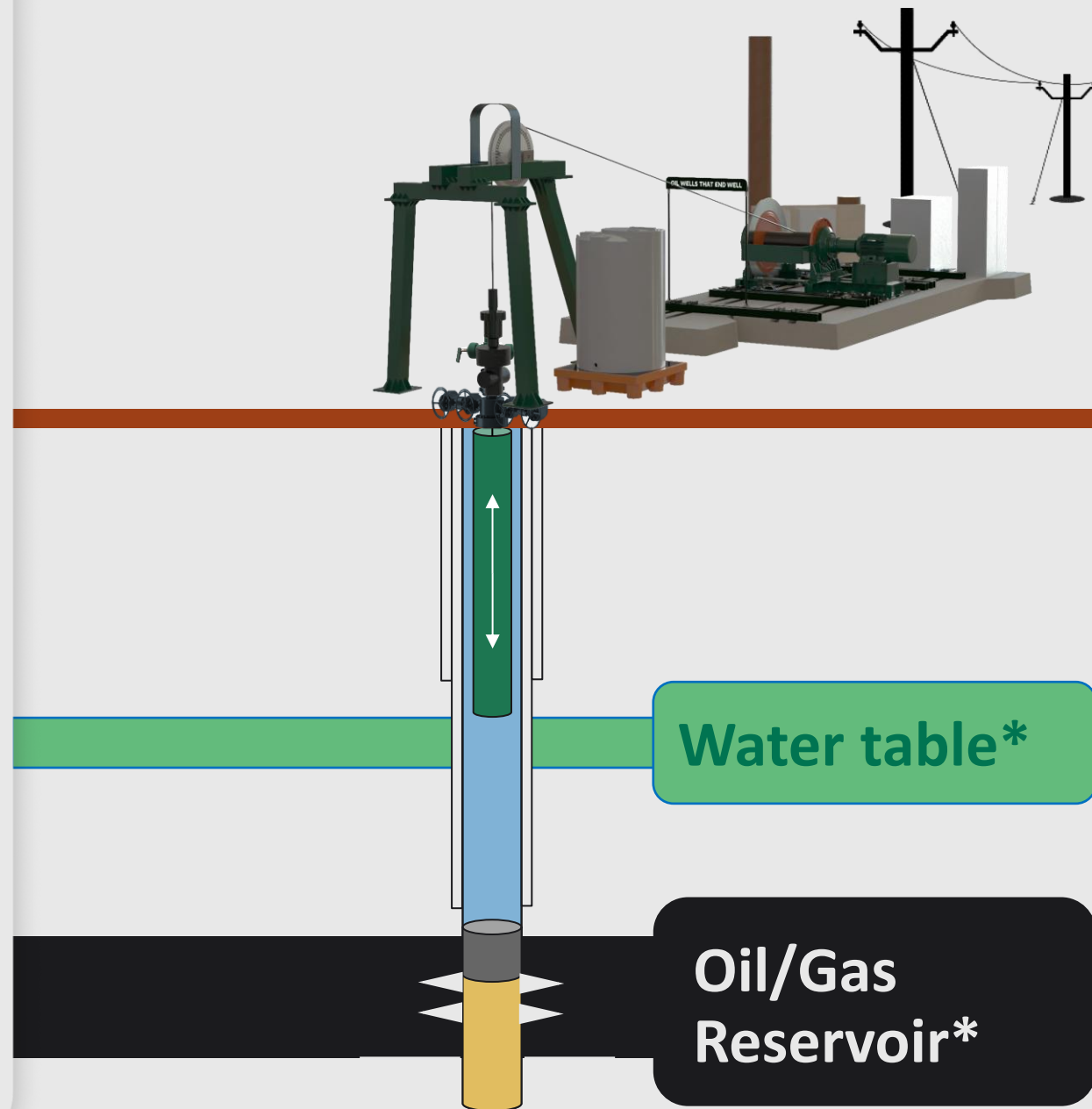


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2. Use the workover rig to install the weight
3. Install our energy storage and monitoring equipment

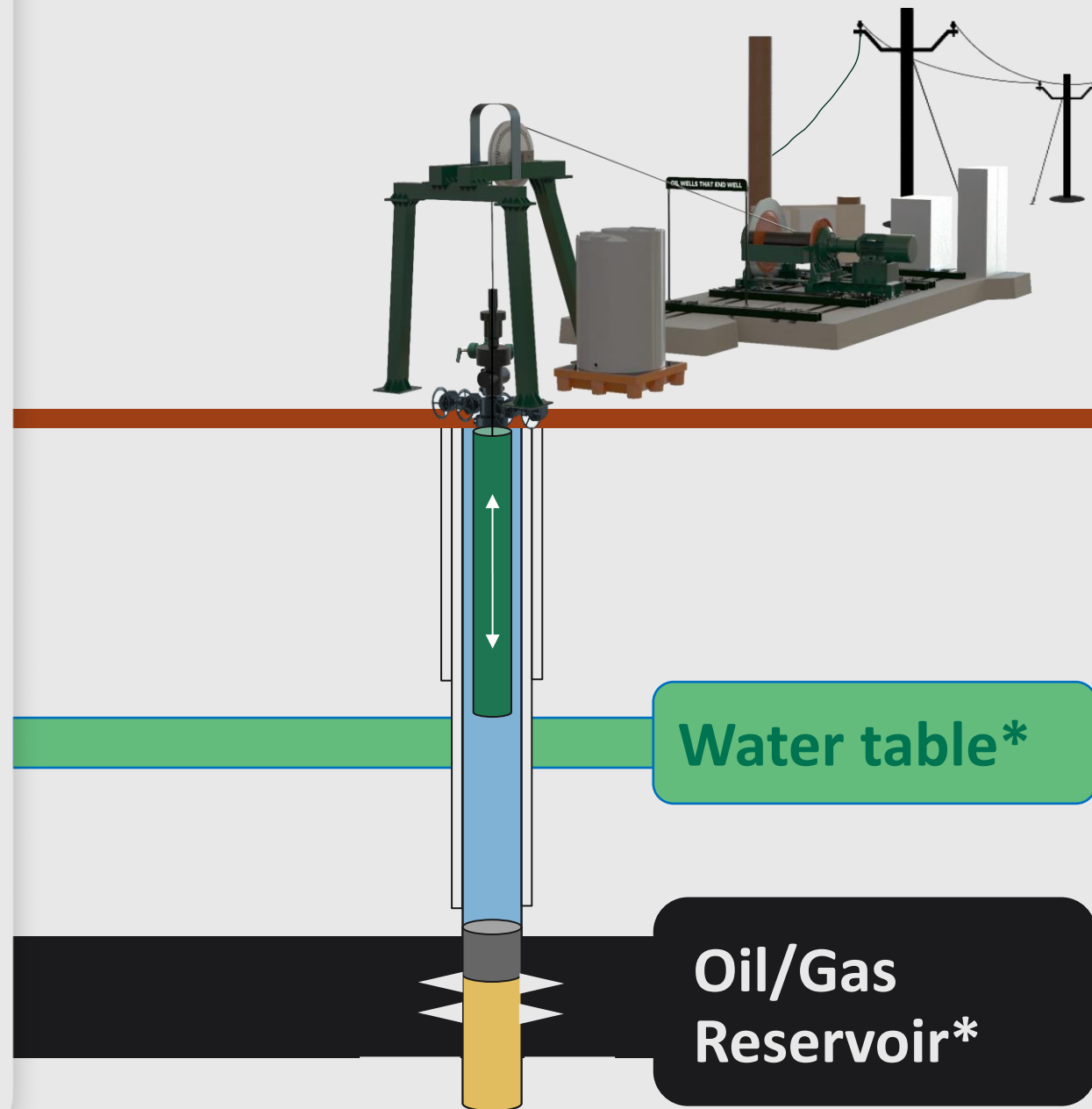


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2. Use the workover rig to install the weight
3. Install our energy storage and monitoring equipment
4. Connect to the electrical grid and begin operations



\*not to scale

## Gravity Well: 2-in-1 Solution

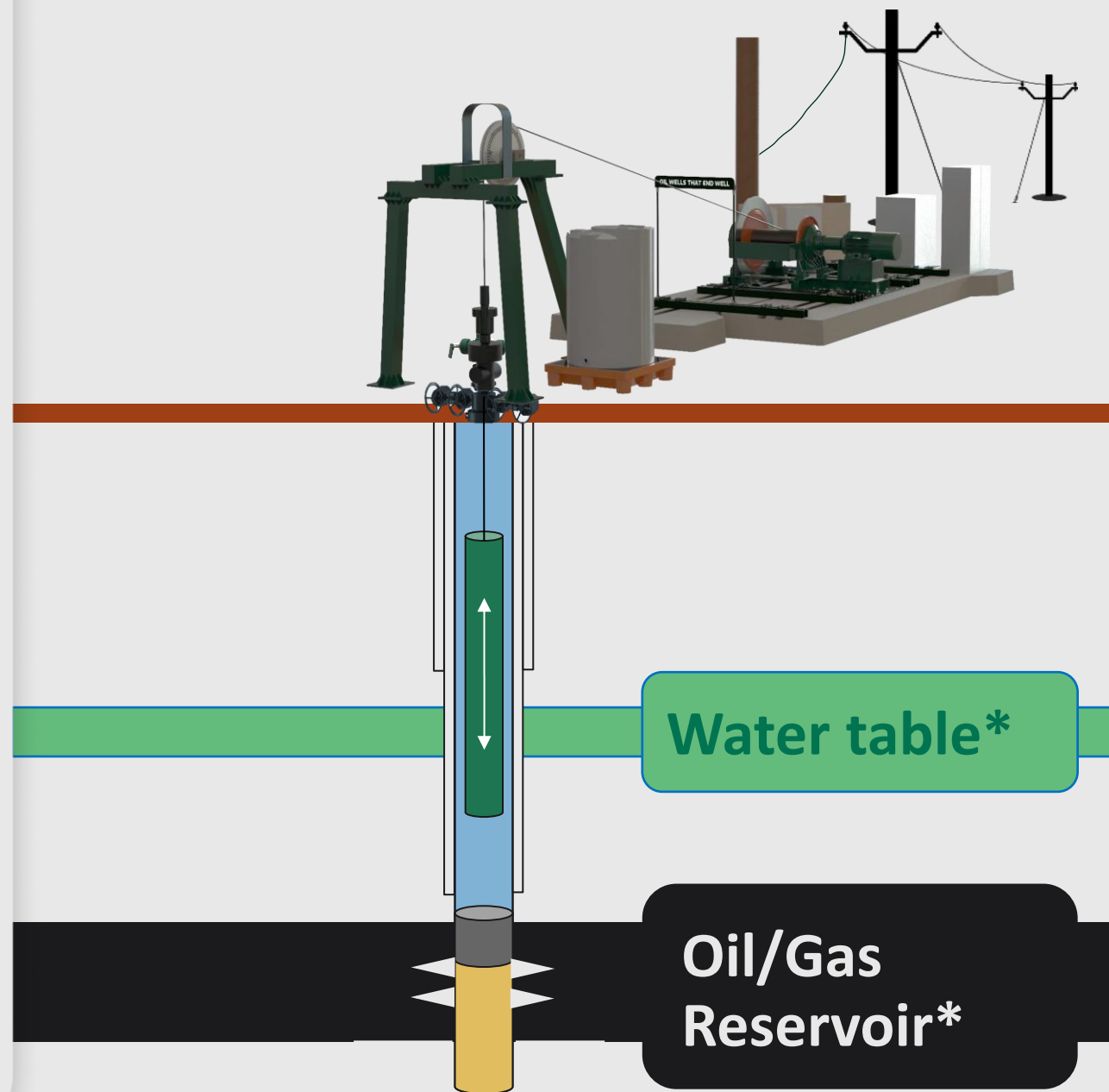
The result is a well that is:

### Plugged and Protected

- Lower cost than traditional P&A
- Plug seals oil/gas reservoir
- Wellhead equipment for spill protection

### Monitored 24/7

- Methane gas leak detection
- Mechanical integrity tests
- Fluid level in trip tank



\*not to scale



# 2025

1st commercial scale device





# Why convert an idle well?

**\$50k cost savings** compared to P&A.

Details: For a suitable well, conversion to a Gravity Well costs less money, including our “Activation Fee”, and you keep the cost savings.

Cost: Conversion vs P&A

Remediate Surface

Cut out wellhead

Between 3 to 8  
cement plugs

Well Prep

## Cost Savings

Activation Fee: oil  
company pays  
Renewell

Bridge Plug

Well Prep





## Preserve Optionality

Predicting oil prices is nearly impossible.

Predicting the future needs of humanity... Good luck!



# Gravity Well: 2-in-1 Solution

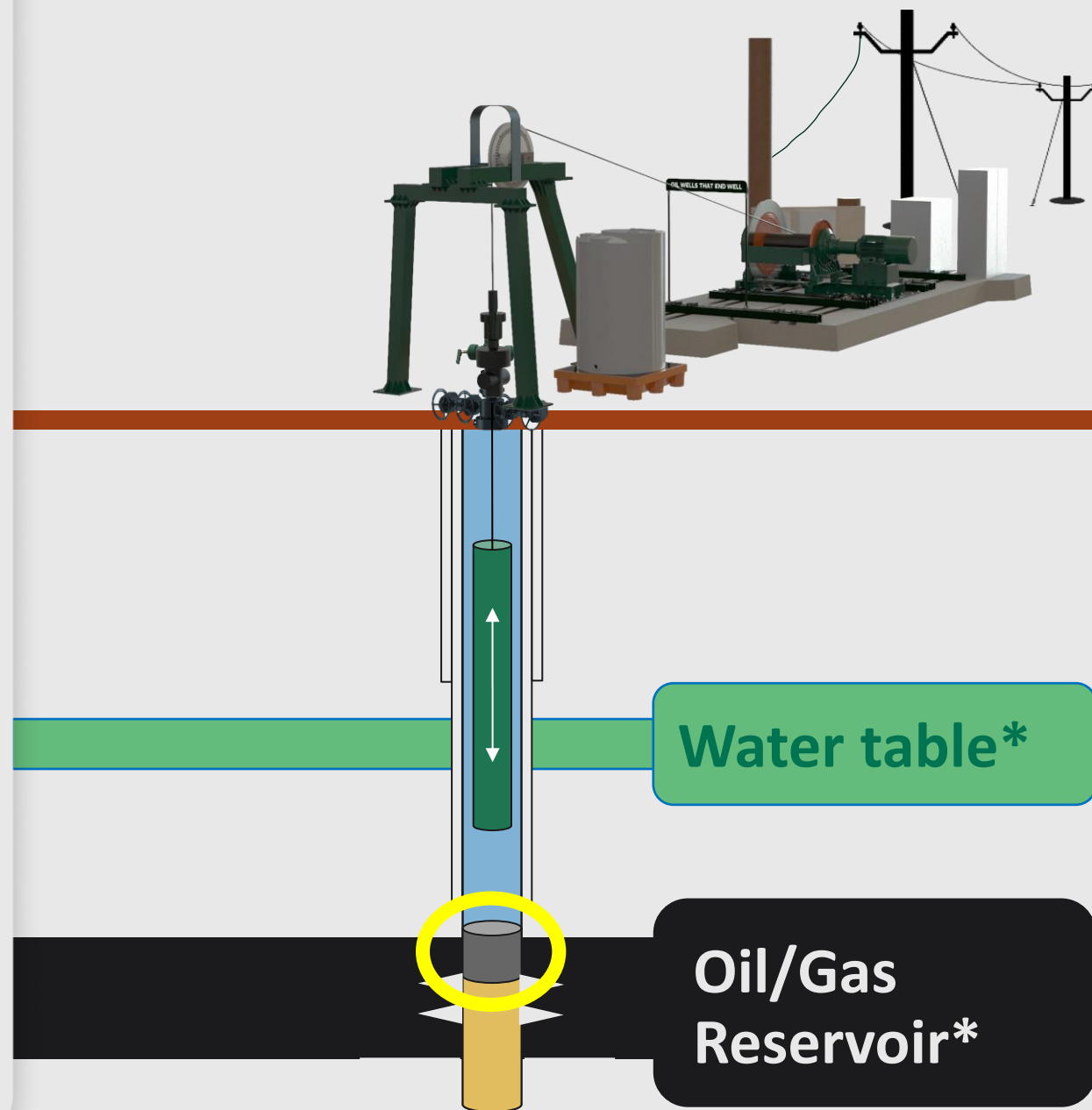
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\* not to scale





## Preserve optionality for how long?

- The Rocky River Pumped Hydro Station was built ~100 years ago and is still operating today.
- Gravity-based energy storage has no production decline (unlike oil/gas production).
- The P&A obligation is delayed as long as the well casing holds integrity.

**Location:** New Milford, CT **River System:** Housatonic River **Capacity:** 29 MW **Turbines:** 2 GE (3.5 MW) and 1 GE (23 MW)  
**Originally Built:** 1928

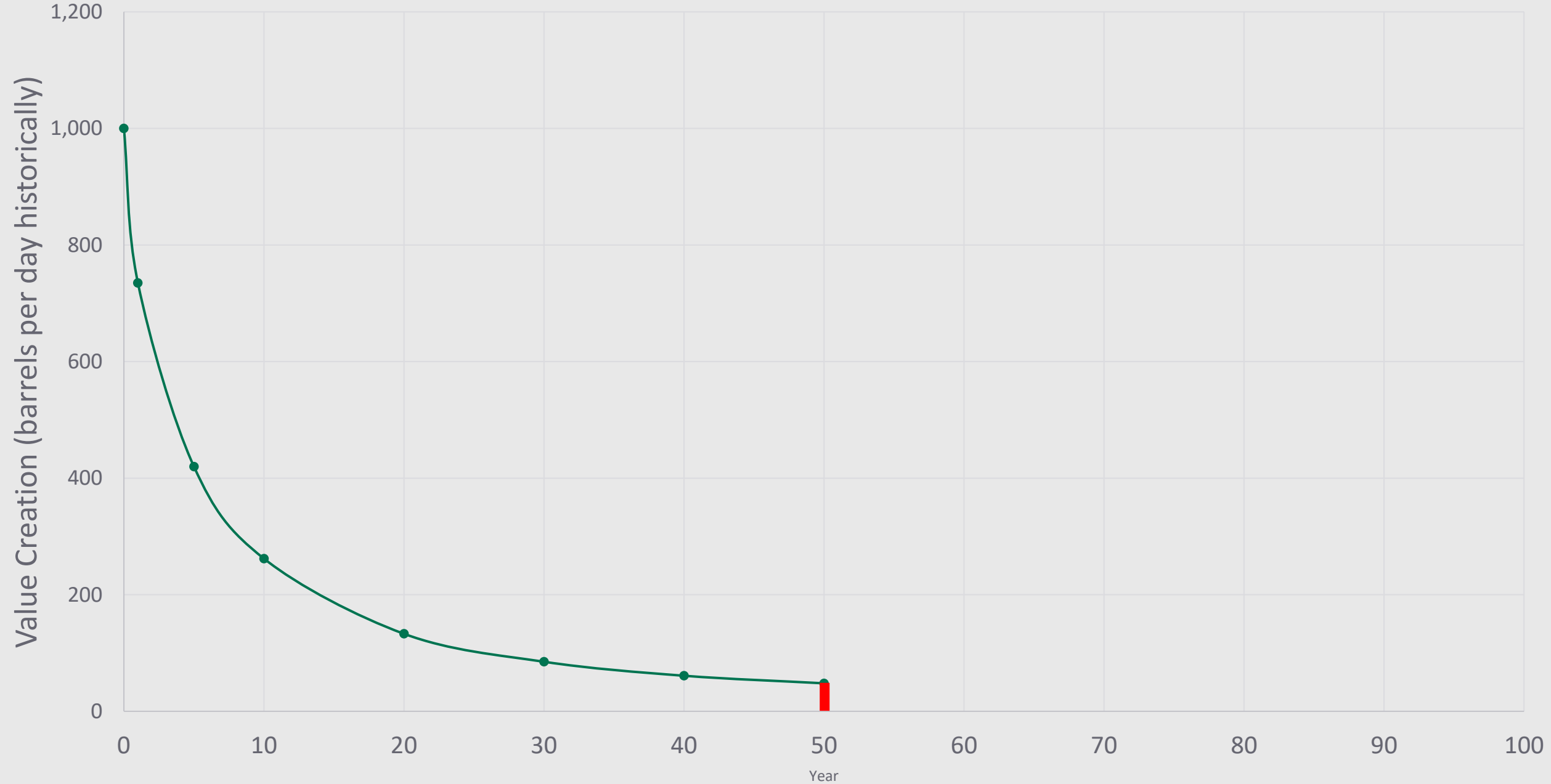
## Perfect Time in Colorado

- 2024: Colorado bill (SB24 – 218) passed that forces utilities to **create a market for energy storage**
- 2025: ECMC has greenlighted designation: “*Beneficial Use*”. This new status **removes wells from the plugging list**.

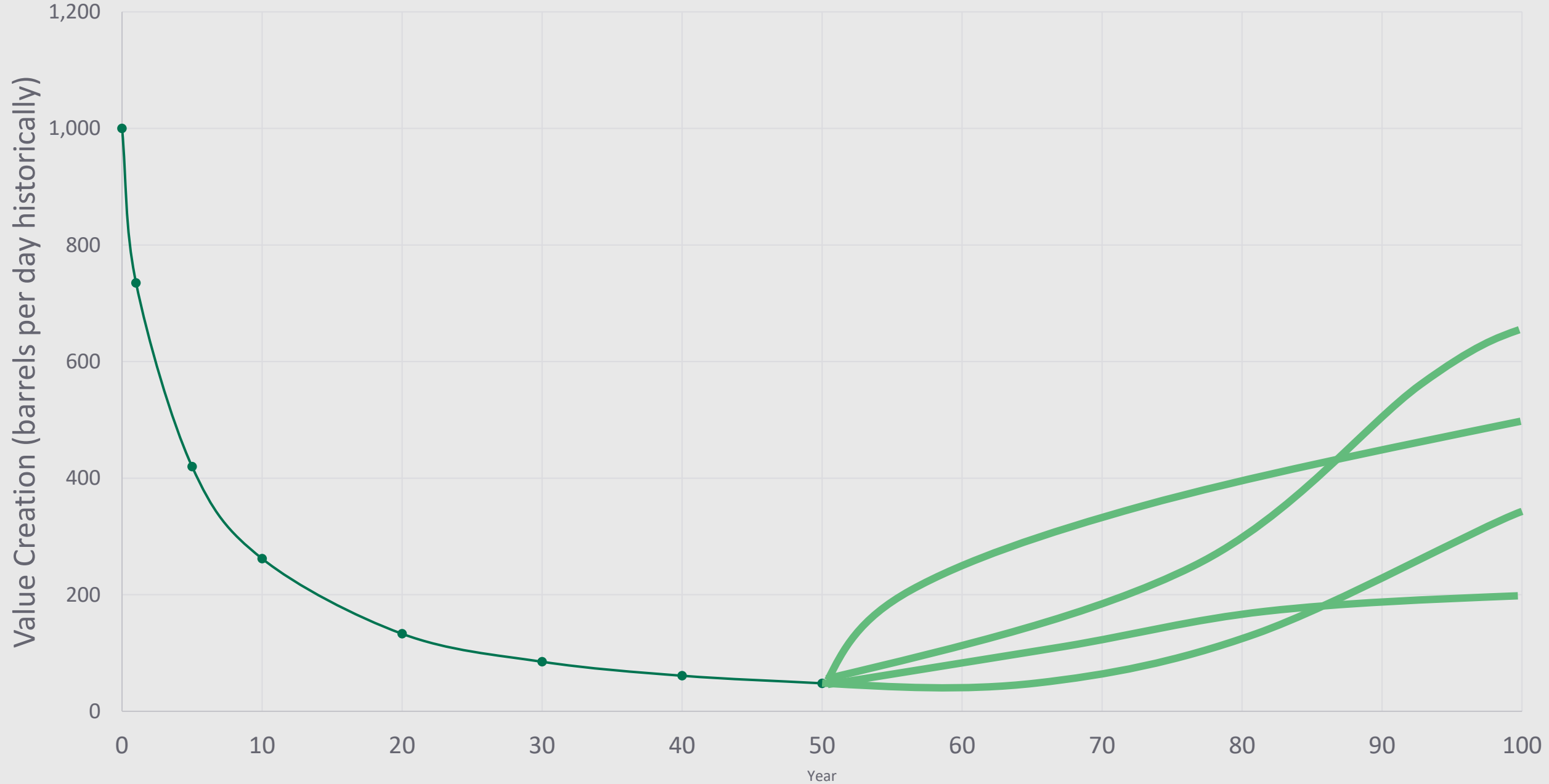
***\*\*New Mexico and California are similarly advanced***



# Value Creation per well vs. Time



# Value Creation per well vs. Time





# Thanks! Interested? I'd love to chat.

[stefan@renewellenergy.com](mailto:stefan@renewellenergy.com)

