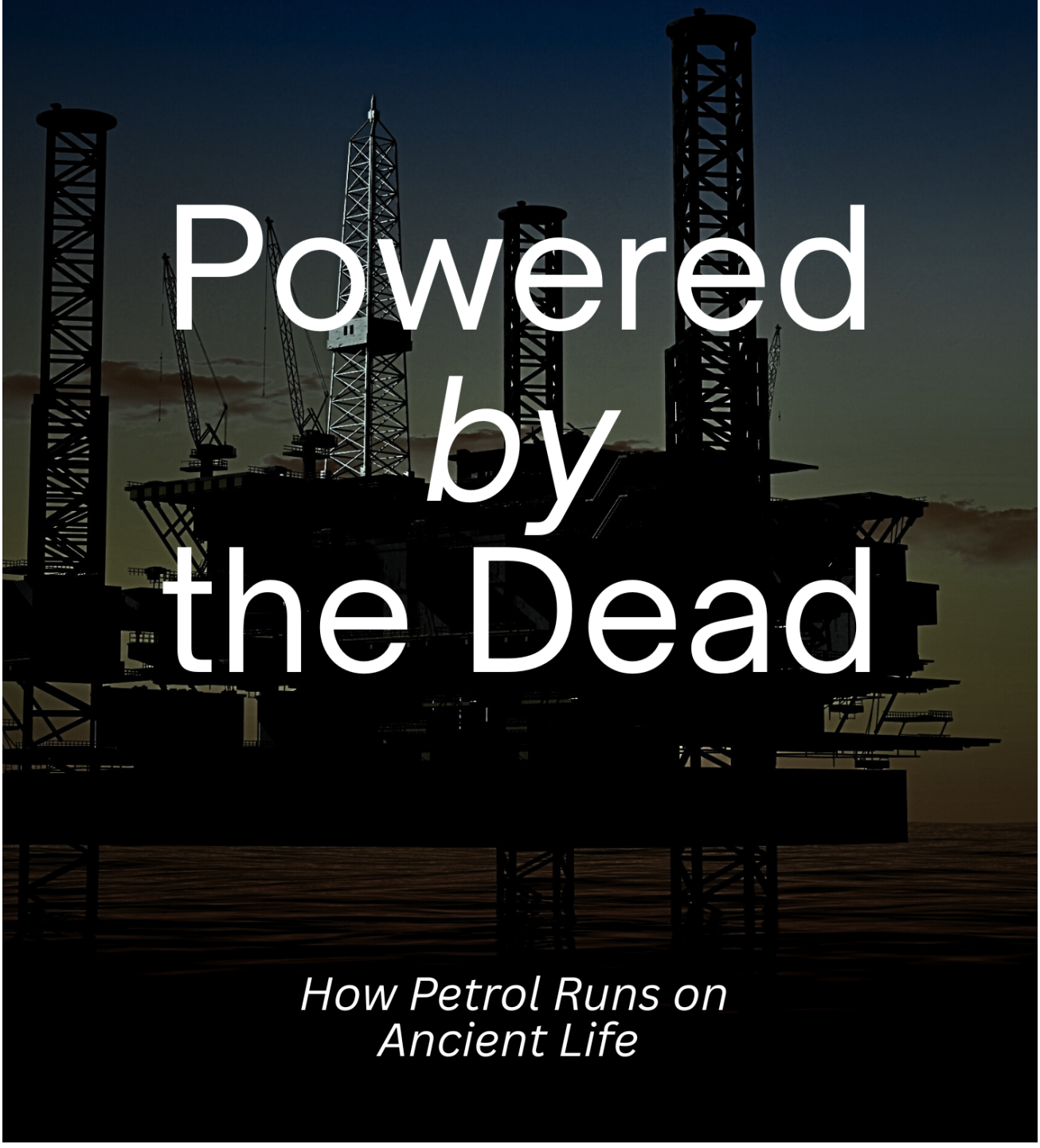
Prashna Siddhi

PETROL

Powered *by* the Dead



How Petrol Runs on Ancient Life

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Every time you start your vehicle, you are burning ancient life —
millions of years old.

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PETROL — From the Dead

Every time you start your vehicle, you are burning ancient life — millions of years old:

The fuel in your tank is not simply a liquid refined in a modern factory. It is the transformed remains of organisms that once lived, moved, breathed, and absorbed sunlight on Earth. Long before human civilization, before language, before recorded history, Earth's oceans were filled with microscopic life. Plankton, algae, and simple marine organisms captured sunlight through photosynthesis and converted it into organic matter. When these organisms died, their bodies sank to the ocean floor and were buried under layers of sediment.

CHEMICAL REACTIONS:

Over millions of years, these remains were compressed beneath thick deposits of rock. As burial depth increased, temperature and pressure rose steadily. The Earth became a slow chemical laboratory. At depths where temperatures reached approximately 60°C to 120°C, the buried organic material entered what geologists call the oil window. Within this temperature range, complex biological molecules slowly transformed into hydrocarbons. Below 60°C, the transformation remains incomplete. Above 120°C, oil begins to break down further into natural gas. Between roughly 120°C and 225°C lies the gas window, where hydrocarbons become lighter gases. What began as living tissue was gradually rearranged into the molecular structure of fuel.

This transformation required immense time. Tens to hundreds of millions of years passed as pressure, temperature, and geological forces worked silently beneath the surface. What nature created slowly, layer upon layer, under precise conditions, we now extract within a century. Petrol is not merely a commodity. It is compressed geological time. It is sunlight captured in ancient biological systems and preserved beneath the Earth.

Crude oil does not remain exactly where it was formed. After transformation, liquid hydrocarbons slowly migrate upward through porous rock layers. Because oil is lighter than water, it moves gradually until trapped beneath impermeable rock formations. These natural reservoirs act as underground storage chambers. Oil fields are not random pockets of liquid; they are the result of specific geological conditions — organic origin, appropriate burial depth, temperature range, migration pathways, and structural traps. The existence of an oil reservoir reflects a precise combination of time and circumstance.

Modern civilization learned how to drill into these reservoirs. Steel penetrates sedimentary rock. Platforms rise from land and sea. What required millions of years to form is brought to the surface in

days. This is not simply extraction; it is acceleration. Nature accumulates in geological time. Civilization consumes in historical time. Oil forms over millions of years. We burn it in seconds.

GLOBAL OIL CONSUMPTION:

Global oil consumption today is approximately one hundred million barrels per day. One barrel contains one hundred fifty-nine litres. Humanity burns billions of litres daily. Each litre represents ancient biological matter transformed under pressure and heat across geological ages. In a single year, global consumption reaches tens of billions of barrels. Formation does not operate on annual cycles. It operates on epochs.

Petrol is not crude oil in its raw state. After extraction, crude oil is transported to refineries, where it is heated and separated according to boiling points in a process known as fractional distillation. Lighter components rise first. Heavier components remain lower. From a single barrel of crude oil, multiple products emerge: petrol, diesel, jet fuel, liquefied petroleum gas, lubricants, bitumen, and petrochemical feedstock. Petrol is only one fraction among many.

Oil's influence extends far beyond transportation. Plastics, synthetic fabrics, fertilizers, detergents, medicines, cosmetics, packaging materials, asphalt roads, electronic components, and countless industrial products depend on petroleum derivatives. Modern agriculture relies on petroleum-based fertilizers and machinery. Global supply chains depend on diesel-powered logistics. Even renewable energy systems require petrochemicals in their manufacturing processes. Civilization is not merely powered by oil; it is structured around it.

Some energy sources renew naturally within short cycles. Sunlight renews daily. Wind renews continuously. Water circulates through evaporation and precipitation. Oil does not renew on human timescales. The geological processes that create oil require millions of years. For practical purposes, oil is finite. This does not imply sudden disappearance. It means the replenishment rate does not match the consumption rate.

NATURE DOES NOT WASTE:

Nature does not waste. Dead leaves become soil. Soil nourishes new growth. Organic matter decomposes and returns to circulation. Petrol itself is part of this long recycling chain. Ancient marine organisms captured sunlight and stored it in chemical bonds. Burial preserved that stored energy. Under heat and pressure, biological material transformed into hydrocarbons. Oil is accumulated transformation.

Modern economies measure wealth in currency, yet much of what we call wealth originates from geological inheritance. Oil fields, coal deposits, natural gas reservoirs, metals, and minerals predate

human civilization. We extract them, refine them, trade them, and price them. But we did not create them. We uncover them. The Earth performed the process long before humanity appeared.

PETROL IS COMPRESSED TIME:

Petrol is compressed time. It represents biological cycles, geological burial, tectonic pressure, and thermal transformation. When we fill a fuel tank, we are handling millions of years condensed into litters. Time that cannot be recreated within a human lifespan. Time shaped by planetary conditions beyond human design.

Energy itself is neutral. Understanding origin changes responsibility. Fire cooks food and destroys forests. Petrol enables mobility, trade, emergency services, and medical supply chains. It also releases carbon dioxide into the atmosphere. The chemical equation is straightforward: hydrocarbon plus oxygen yields carbon dioxide, water, and energy. Carbon stored underground for millions of years re-enters the atmospheric cycle within seconds of combustion. This is not moral commentary. It is chemistry.

Every action produces consequence. In physics, this is reaction. In ecology, this is balance. In economics, this is feedback. In human understanding, it is sometimes called karma — not as reward or punishment, but as settlement. When ancient carbon is released into the atmosphere, the atmosphere responds. When systems experience imbalance, adjustment follows. This is not philosophy imposed on science; it is the structure of systems.

CIVILIZATION:

Civilization operates on stored geological capital. For millions of years, energy was deposited beneath sediment. In two centuries, large portions of that deposit are withdrawn. Withdrawals create consequences. Not through judgment, but through mechanics. Systems tend toward balance.

This booklet is not a condemnation of fuel use. It is an invitation to awareness. Understanding origin changes perception. Perception influences behaviour. Behaviour shapes culture. Culture shapes policy. Policy shapes systems. Energy transitions are not purely technological; they are shifts in understanding.

We live in an age of extraordinary capability. We move across continents in hours. We illuminate cities at night. We connect across oceans instantly. Much of this capability is powered by ancient life transformed beneath the Earth. When prehistoric organisms captured sunlight, they did not foresee engines. When sediments buried their remains, they did not anticipate refineries. Yet geological processes preserved that energy across epochs.

The story of petrol is a story of time, transformation, and consequence. Civilization is built not only on innovation, but on inheritance. We inherit geological processes we did not initiate and biological systems we did not design. Awareness of that inheritance deepens perspective. It invites humility without fear, responsibility without accusation, progress without arrogance.

Petrol is powered by the dead. What powers the future will depend on the living.

This booklet is part of the *Nature & Civilization* knowledge series by Prashna Siddhi. Upcoming explorations include Gold, Diamonds, Uranium, and the deeper origins of material wealth. For further reading, visit: **Prashnasiddhi.com**