

Oil and Ink: The Physical Economy Behind Everyday Life

By Jeffery A. Garfield · October 10, 2026 · Edition 1.0

Follow everyday goods and digital payments through materials, manufacturing, financing and the agreements that assign risk.

Pay for your coffee with cash, tap a card or hold your phone over the terminal. Each feels ordinary. Each depends on an extraordinary amount of work you never see.

Someone manufactured the equipment. Someone supplied the materials. Someone financed the inventory, negotiated the agreements and accepted the risk of getting paid later.

The purchase takes seconds. The systems behind it reach across industries and borders. That is where oil and ink meet.

Oil represents energy, industrial materials and the processes that help manufacture and move goods. Ink represents the agreements that organize ownership, financing, payment and responsibility—even when those agreements exist electronically.

Together, they offer a practical way to see the invisible economy.

Look beyond what the product contains

When we ask whether oil is involved in an everyday product, we need to follow more than its ingredients.

Petroleum can supply material incorporated into an object, fuel used to transport it or lubricants used in machinery. Oil and natural gas also supply chemical feedstocks for plastics and other manufactured materials. EIA identifies both fuel and nonfuel uses, including lubricants, solvents and chemical production. [\[1\]](#) [\[2\]](#) [\[3\]](#)

The connection therefore extends beyond what remains in the finished product.

A glass jar is principally mineral-based. A cardboard box is principally paper-based. To understand their wider dependencies, we also have to examine manufacturing equipment, coatings, packaging and delivery. Their basic material composition answers only part of the question. [\[4\]](#) [\[5\]](#)

The useful question is: What had to be made, powered, maintained and moved before this item reached my hands?

That question produces a more informative answer than an unsupported claim that some fixed percentage of everything contains oil. The sources reviewed here do not establish such a percentage.

Sometimes oil is literally in the ink

Certain printing inks contain petroleum-derived mineral oil. Other formulations use vegetable oils or water-based systems. The specific formulation matters; ink manufacturer Flint Group announced in August 2023 that its sheetfed process-ink range had become mineral-oil-free. [6] [7] [8]

That gives “oil and ink” a literal connection in some printing processes.

Currency requires additional care. The Bureau of Engraving and Printing describes specially formulated inks and a currency substrate containing 75% cotton and 25% linen. Those facts do not establish the petroleum content of today’s dollar-bill ink. They do demonstrate that even the money in our wallets depends on specialized materials, machinery and quality control. [9]

Digital payments still have physical foundations

Move from cash to a card, then from a card to a phone or home computer. The payment becomes less tangible, but its material requirements continue.

Electronic devices contain plastics, insulation and other components made using oil- and natural-gas-derived feedstocks. Fiber-optic networks provide another example: the light-carrying fiber is commonly glass, while protective coatings and cable jackets use polymers. Corning specifies polyethylene jackets in certain cable designs. [10] [11] [12]

Wireless equipment deserves the same examination. A cell tower, antenna, relay or satellite has a manufacturing history. Its components had to be fabricated, assembled, transported and installed.

The relevant investigation follows those processes: Which materials were used? Which machinery required lubrication? What protected the wiring and electronics? What transported the components?

This is a framework for tracing dependencies, not a claim that every component uses petroleum or that every wireless payment travels through a satellite.

Wireless describes a connection. It does not mean the infrastructure has disappeared.

The agreements determine who carries the risk

Now consider a hypothetical manufacturer supplying equipment to a communications company.

It orders materials, pays employees and schedules delivery. Its customer may pay weeks after receiving the equipment. Financing helps bridge that interval.

Suppose a supplier falls behind and transportation costs rise. The consequences depend partly on what the parties negotiated.

Is the price fixed? Can specified increases be passed through? When does payment become due? Who bears the cost of delay? How long can the manufacturer continue paying its bills while waiting?

Materials make production possible. Agreements establish obligations and allocate particular risks. Neither tells the complete story alone.

Follow the financing, too

The connection reaches into Treasury securities and stock markets.

The U.S. Treasury sells securities to refinance maturing debt and raise money for government operations. Buying a Treasury security does not ordinarily earmark the proceeds for one particular infrastructure project. [13]

Companies can raise capital by issuing shares. Buying existing shares from another investor generally transfers ownership rather than providing fresh funds to the company. Understanding that distinction helps us follow where money actually goes. [14] [15]

Make the connection useful

Infrastructure literacy means seeing the systems beneath the outcome. Applied infrastructure literacy means using that understanding to make better decisions.

Before purchasing, lending, investing or negotiating, ask:

- Which materials and processes make this possible?
- Where could a disruption interrupt delivery?
- Who must pay before receiving payment?
- Which agreement assigns responsibility?
- What evidence supports the promise being made?

An ordinary purchase connects physical resources with financial commitments.

Follow the materials. Examine the manufacturing. Read the agreements. Find who carries the risk.

The invisible economy becomes clearer when we learn to follow those connections.

Sources & scope

1. EIA — [Non-combustion uses of fossil fuels](#) — April 6, 2018; reviewed October 10, 2026.
2. EIA — [Use of oil](#) — Undated reference; reviewed October 10, 2026.
3. EIA — [Hydrocarbon gas liquids](#) — Undated reference; reviewed October 10, 2026.
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5. AF&PA — [Paper and wood products](#) — Undated reference; reviewed October 10, 2026.
6. EuPIA — [Mineral oils in offset inks](#) — November 6, 2019; reviewed October 10, 2026.
7. Flint Group — [Mineral-oil-free sheetfed process inks](#) — August 2023; reviewed October 10, 2026.
8. Flint Group — [Sustainability](#) — Undated reference; reviewed October 10, 2026.
9. BEP — [How money is made](#) — Undated reference; reviewed October 10, 2026.
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12. Corning — [Armored cable with HDPE jacket](#) — Undated specification; reviewed October 10, 2026.
13. TreasuryDirect — [Frequently asked questions](#) — Undated reference; reviewed October 10, 2026.
14. SEC Investor.gov — [Stocks](#) — Undated reference; reviewed October 10, 2026.
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Evidence cutoff: October 10, 2026. Edition 1.0. Cited material statements are source-backed facts. The oil-and-ink framing is author interpretation; the manufacturer scenario is hypothetical; the closing questions are practical recommendations. No universal petroleum-content percentage or current currency-ink petroleum formulation is established. This is an educational companion, not a breaking-news report.

Source maintenance, October 15, 2026: updated the Corning coating reference to its working official address and supplied its November 2021 issue date. The article's original publication date and analysis are unchanged.

Source links

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