

# The history of petrochemicals and their impact on global geopolitics

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All aspects of people's lives are now bound to a "seemingly unlimited supply of cheap and readily disposable" petrochemicals, a new essay argues.

Global demand for petrochemicals continues to outstrip increases in [production capacity](#), despite substantial expansion in production in China and the Gulf.

The piece, written by Professor Adam Hanieh from the University of Exeter, describes how the synthetic production of petroleum drove post-war revolutions in productivity, labor-saving technologies and mass consumption.

From the 1950s onwards, an array of naturally derived substances—wood, glass, paper, [natural rubber](#), natural fertilizers, soaps, cotton, wool and metals—were systematically displaced by plastics, synthetic fibers, detergents and other petroleum-based chemicals.

The growth of plastics at this time was possible thanks to the growth of the chemical industry in Germany and the U.S. in the early 20th century. By the end of the Second World War, the US was the dominant global chemical power.

Professor Hanieh, writing in the *New Left Review*, said: "Understanding the history of petrochemicals can help us all to understand the intertwined histories of oil and capitalism."

Germany supplied around 90 percent of the world's synthetic dyes up until the First World War. The conflict led to significant changes to chemical production. The company IGF played a central role in the war effort, pioneering the development of poison-gas weapons (utilizing by-products of the dye industry) and synthetic nitrates for the manufacture of explosives and fertilizers.

Across the Atlantic, leading American chemical companies also profited from the war. The Trading with the Enemy Act (TWEA) in October 1917 and the establishment of a new office called the Alien Property

Custodian (APC) allowed the American state to seize German-owned patents and German-owned businesses, with a particular focus on the chemical industry. At the end of the War, the APC held an estimated \$700 million worth of seized German assets in 30,000 trust accounts. Firms benefitted greatly from the transfer of German patents, applying new techniques to expand their output and range of basic chemicals.

By 1937 IGF was essentially transformed into the industrial arm of Germany's military. Twenty-four leading executives of IGF were indicted and tried at Nuremberg, with thirteen eventually found guilty of war crimes including slavery, mass murder and plunder. Those eventually sentenced to prison received extremely short sentences and early pardons and were quickly reintegrated into the top echelons of West German industry. IGF itself was broken up into its original constituent parts of Bayer, Hoechst and Basf.

In the U.S., significant levels of government funding was directed into [petrochemical](#) research and refinery construction during the war, and manufacturing volumes for basic petrochemicals grew at an unprecedented pace.

There has been a steady decline in the relative power of long-standing Western petrochemical companies; in 2010, 32 of the top 50 chemical producers in the world had headquarters in North America or Europe, a figure that had dropped to 28 by 2020.

China and the wider Asia region are now core zones of petrochemical production and consumption. Petrochemical consumption underlays initial Chinese production of cheap domestic goods, furniture and clothing, spearheading the country's export dominance across markets in the rest of the world. Nearly 30 percent of the world's increase in petrochemical capacity over the next decade is expected to come from China.

The Gulf Cooperation Council (GCC), a group of six Arab states, now holds 6 percent of global petrochemical capacity, a figure that has doubled since 2000. Led by Saudi Arabia, the GCC is now a leading producer of several basic petrochemicals.

China's Sinopec and Saudi Arabia's Sabic now rank as the second and fourth largest petrochemical companies in the world respectively, up from fifth and seventh places in 2007. Sinopec is directly involved in the ownership, exploration and production of crude oil and gas, while Sabic is 70 percent owned by Saudi Aramco, the world's largest oil producer.

State involvement in the petrochemical sector has been a significant driver of private capital accumulation across Asia and the Middle East.

**More information:** Adam Hanieh, Petrochemical Empire.  
[newleftreview.org/issues/ii130... petrochemical-empire](https://newleftreview.org/issues/ii130...petrochemical-empire)

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