



April 8th, 2021

Oil Price Rebound & Increase in Clean Energy Investment

Year of 2021 has seen a better outlook for oil industry as the oil price has rebound to the price of pre-pandemic. This is definitely a good news.

Meanwhile, clean energy has also seen an increase in investment as a step to reduce carbon footprint. Although the transition to clean energy might take a longer time but with the rises of oil price will definitely helps to increase the funding for more clean energy technology.

One of the small steps towards the ultimate green energy is to reduce the carbon footprint of the existing products where oil companies now are focusing on Euro 5, B20, and sustainable aviation fuel (SAF). Every small effort that we make now will create a big impact to our future generations.

The difference between Clean, Green, and Renewable Energy

Combating climate change, zero carbon by 2040, electric cars; all in the name of preserving our environment and ensuring we have something good to leave for future generations. For the oil majors, it means looking into developing new technologies and moving away from traditional fuel sources as a mean to power our economy, and it leads us nicely to the topic for today: clean, green and renewable energy.



We often use the term 'clean' and 'renewable' interchangeable but there is a slight difference between both terms. For example, wind power can be considered as a clean, green, and renewable energy source whereas electric energy can be classified as either green, clean, or renewable energy. Even though there is no carbon emission from using electric as a source of power (making it clean energy), how we get electricity will determine whether that electric energy is green and renewable.

Using coal as a source to generate electric energy? Then that electric energy is no longer green, renewable, and clean. Using wind power will result in the electric energy being green, renewable, and clean. In that case, we can come up with some easy ways to determine the classification of energy sources.

When using this energy source, will it results in any air pollution?

If no, is it clean.

When using this energy source, do it come from a natural source?

(Solar, Wind, Hydro) If yes, it is green.

When making this energy source, do we use recyclable materials?

If yes, it is renewable.

In an utopian world, future power generation would be from clean, green, and renewable sources. In this imperfect world we live in, we will have to make do with a combination of all three sources and what we should aim for is the have more sources from clean, green, and renewable sources and move away from traditional sources. It is heartening to see the world align and work together towards this common goal, for the brighter future for all humankind.

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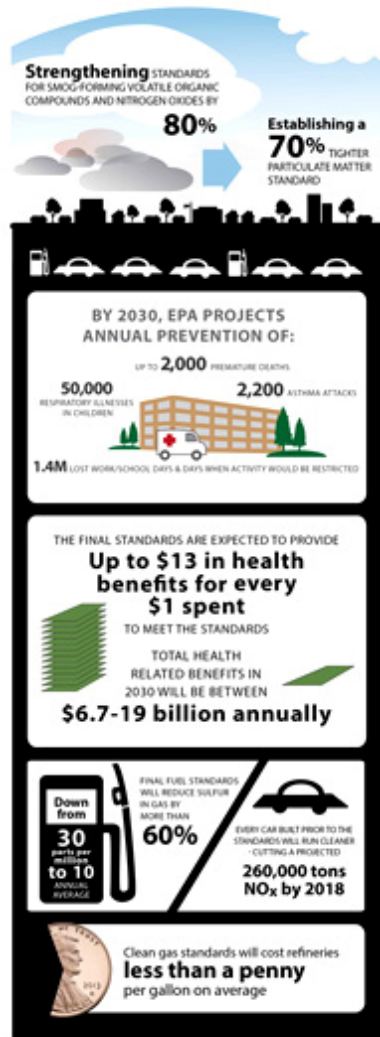
<https://www.chemopharm.com/solutions/oil-gas>



REDUCING AIR POLLUTION FROM PASSENGER CARS & TRUCKS

TIER 3 VEHICLE & FUEL STANDARDS WILL PROVIDE SUBSTANTIAL

POLLUTION REDUCTION AT LOW COST



Source: U.S. EPA

www.epa.gov

Source:

<https://www.epa.gov/gasoline-standards/gasoline-sulfur>

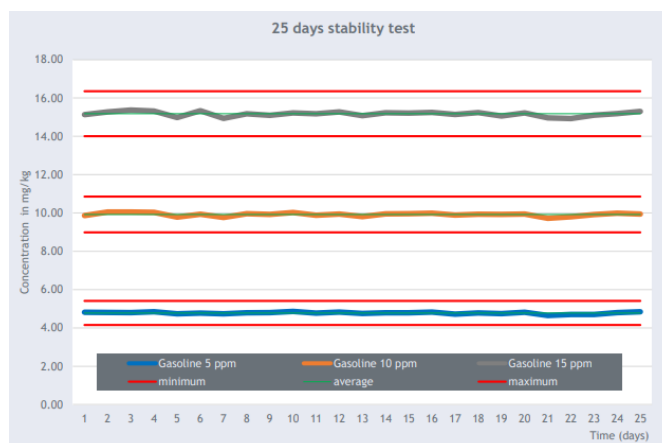
EPA Tier Three Requirement

Starting from January 1st of 2017, the US Environmental Protection Agency (EPA) has introduced a program to reduce the air pollution from passenger cars and trucks. This program is named as the Tier 3 requirement that incorporate the performance based on Analytical Test Method Approach.

With this, the reduction of sulfur content for petrol become one of the topic of interest as it will lead to a reduction of air pollution and eventually reduces in total emission.

An established test method to determine total sulfur – ASTM D5453 has been adopted in this act to control on the sulfur content in liquid hydrocarbons containing 1.0 to 8000mg/kg total sulfur, boiling in range of 25°C to 400°C.

PAC Antek ElemeNtS analyzer was developed to meet the need of the industry by measuring the total sulfur with Ultra Violet Fluorescence (UVF) for solid, liquid and gaseous material. The system and methodology used in PAC Antek ElemeNtS is thoroughly tested for its linearity, precision and accuracy to validate its performance to meet ASTM D5453 and Tier 3 Regulations.



A 25 days stability test has been performed using **PAC Antek ElemeNtS** to verified on the stability and precision of the test result which can meet the minimum requirements as stated by the EPA.

Overall, the result showed from PAC Antek ElemeNtS system complies to both ASTM D5453 and Tier 3 regulations.

Antek products are recognized by global regulating bodies, leading scientific research institutions and process laboratories for selection multi element detection.



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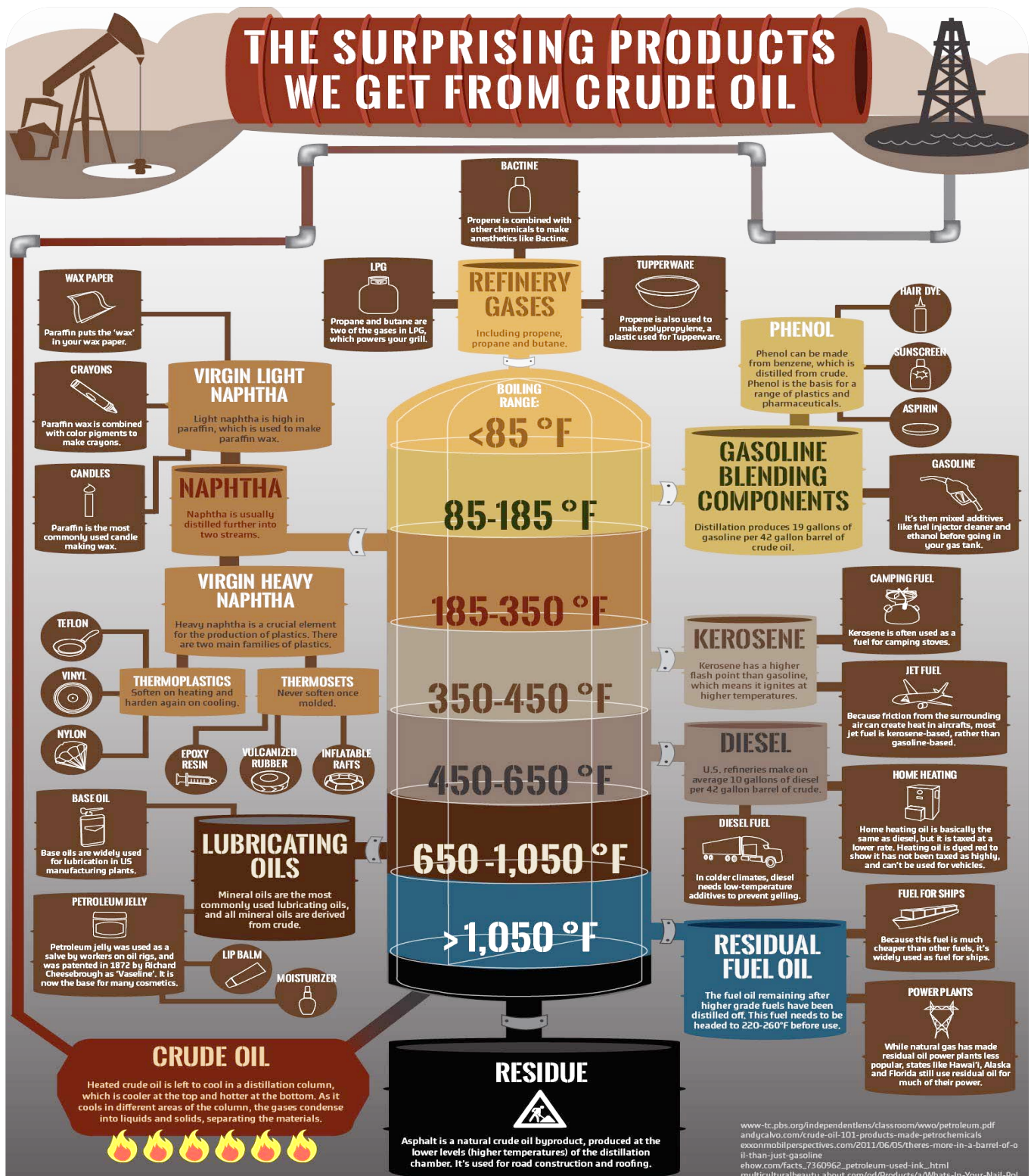
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<https://www.chemopharm.com/solutions/oil-gas>

Fun Facts: How many products that you are using comes from Crude oil?



Presented by



Sources:

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