

Activated Carbon

Oil & Gas Applications

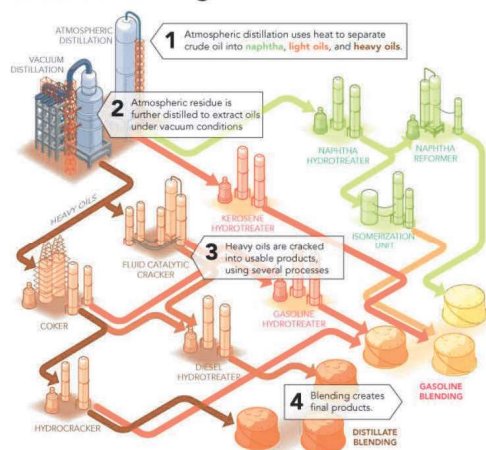


Oil & Gas - Market

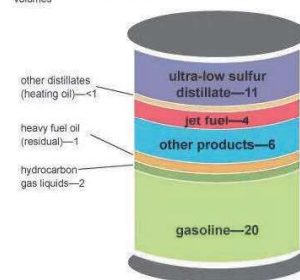
Oil & Gas remains an important source of energy, as well as a key material provider of a wide range of products, from Petro-Chemicals to Pharmaceuticals.

Despite the drive to net zero and global decarbonisation, Oil & Gas will continue to contribute significantly to our global economy for many years to come.

Crude Oil Refining



Petroleum products made from a barrel of crude oil, 2016



Note: A 42-gallon (U.S.) barrel of crude oil yields about 45 gallons of petroleum products because of refinery processing gain. The sum of the product amounts in the image may not equal 45 because of independent rounding.
Source: U.S. Energy Information Administration, Petroleum Supply Monthly, February 2017, preliminary data for 2016.

The development of environmental technologies and processes will eventually support the transition to low or zero emissions.

In the interim preventing the release of highly toxic compounds is critical for any current Refinery or Petro-Chemical plant.

Carbon Activated Europe have developed a range of activated carbon products specifically designed to offer environmental protection to refineries, terminals and offshore facilities.

Oil & Gas Processes



Condensate Water Purification

Steam condensate in the boiler water recirculation system would be purified by activated carbon and ion exchange resins. The activated carbon is needed to remove oil and heavy hydrocarbons upstream of the IEX to prevent it from fouling processes.

The ash content of standard activated carbons leads to higher silica leaching and IEX damage.

Carbon Activated Europe offers a carbon grade with a low silica release. Thus, reducing the volume of backwash water and protecting the downstream IEX from functional loss.

Vapour Recovery Units

To prevent vapour loss in storage or transport, activated carbon is used as an adsorbent. The concentration range of these compounds are frequently classified as combustible, requiring an activated carbon that generates minimal heat.

Carbon Activated Europe offers specialist activated carbons with high adsorption capacity that generate minimal heat combined with ease of desorption.

Oil & Gas Processes



Gas Processing

Gas production processes require different purification steps including the filtration of solid particles and water droplets, dissolved hydrocarbons as well as the removal of degradation products. Activated carbon used in the process protects downstream equipment and catalysts, thereby improving efficiency and lowering operational costs.

Mercury Removal

Mercury is a dangerous carcinogen which can also have a highly corrosive effect on downstream equipment, for example on alumina heat exchangers used in LNG production.

Mercury can be found in natural gas as well as in petrochemical and some refinery feed stocks.

Carbon Activated Europe offers a high activity, impregnated carbon, supplied in either coconut shell (granulated) or coal based (Pellets) for Mercury removal.



Oil & Gas Processes

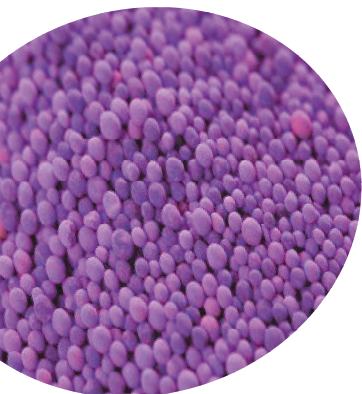


Natural Gas Desulphurisation

Natural gas may contain different sulphur compounds and concentrates, dependent on its source. Activated carbon is used in a combination with other technologies to reduce the residual concentrations of the sulphur compounds. This is important in the protection of catalysts used in the downstream processes.

For low oxygen conditions Carbon Activated Europe offers a high-capacity impregnated carbon which offers the added advantage of in-situ regeneration.

Carbon Activated Europe have developed a range of carbons specifically for Oil & Gas applications. We have an R&D group working in tandem with our laboratory services and customer base to produce the most suitable activated carbon product and services for your Oil & Gas process.



Activated Carbon Solutions

Liquid Phase

Carbon Grade	Amine Recovery	Glycol Recovery	HPNA Removal	Process Water	Condensate	Produced Water	Waste Water	Remediation
COL-L850								
COL-L900								
COL-L950								
COL-L1000								
AGC-L850								
AGC-L900								
AGC-L950								
AGCL-1000								
COC-L1000								
ACOC-L1000								
PT-Chemsorb								
COL-L700								
COL-L750								
COL-L800								

Gas Phase

Carbon Grade	Vapour Recovery	VOC Removal	Mercury Removal	Desulphurization	Odour Control	Reformer Gas	Catalyst Protection	PSA
COL-PA80								
COL-PA90								
COC-A50								
COC-A60								
COC-A40								
COC-A50								
KAL-3000								
COL-Mercusorb								
Sulfisorb								
Sulfisorb Plus								

Please use the table above to match your process requirements with our range of activated carbons.

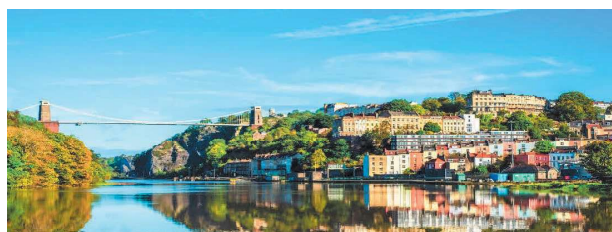
If you require additional information or technical assistance, please do not hesitate in contacting us.



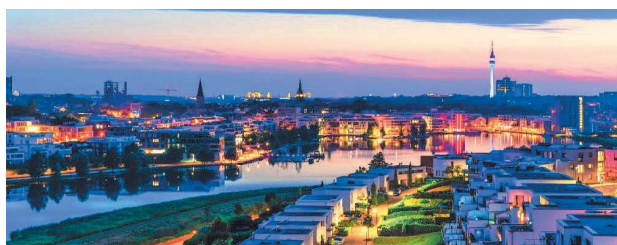
Member of the Carbon Activated Group of Companies

Services & Contact Details

Carbon Activated Europe are pleased to offer our range of activated carbons and services to our Oil & Gas clients. EMEA regional office contact details can be seen below.



Carbon Activated Europe
Bristol, UK
+44 (0)1454 546547



Carbon Activated Europe
Gdansk, Poland
+48 (0) 501 759 849



Carbon Activated Europe
Dortmund, Germany
+49 (0)231 5432 0734



info-europe@activatedcarbon.com

www.carbonactivatedeurope.com