

# Hydrocarbon distribution: oil and gas shows, Phanerozoic and Neoproterozoic basins of Western Australia

by

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## Abstract

The Energy Systems Atlas is a collection of new geological map layers designed to help explorers identify each of the essential elements and processes of a petroleum system: source, reservoir, seal, burial, maturation, stratigraphic framework, structure, trap formation and migration. A set of layers have been compiled to show the known distribution of hydrocarbons. This layer comprises hydrocarbon shows including descriptions of fluorescence oil shows and mud log gas measurements within the Phanerozoic and some Proterozoic basins of Western Australia, compiled from new and legacy data submitted to or generated by the Geological Survey of Western Australia (GSWA). These datasets are useful for assessing trends in oil and gas distribution. The hydrocarbon shows originate from reports submitted to GSWA including from petroleum companies, other government departments, academic institutions and research bodies as well as new analyses by GSWA covering the majority of Western Australian sedimentary basins. New hydrocarbon shows data will be added as they become open file.

The geology of the rocks containing hydrocarbon shows and descriptions of the data and methods of data collection are outlined in the original reports, which are included in the attribute tables for all data in the Energy Systems Atlas. GSWA publications are available from the [DMIRS eBookshop](http://www.dmirs.wa.gov.au/wapims). Unless otherwise stated the depths are given as metres measured depth.

## How to access

The **Energy Systems Atlas** is best accessed using the Western Australian Petroleum and Geothermal Information Management System ([WAPIMS](http://www.wapims.wa.gov.au)). This online interactive mapping system allows data to be viewed and searched together with other datasets. The Energy Systems hydrocarbon shows are also available as a data package on request from WAPIMS/requests form.

## Recommended reference

Brooks, DM and Irimies, F 2021, Hydrocarbon distribution: oil and gas shows, Phanerozoic and Neoproterozoic basins of Western Australia: Geological Survey of Western Australia, digital dataset, <[www.dmirs.wa.gov.au/wapims](http://www.dmirs.wa.gov.au/wapims)>.

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