

# Data Analysis of Ghana's Extractive Sector

## *User Guide*

In many countries extractives data are becoming increasingly available from multiple sources: the World Bank, IMF, UNCTAD, ICTD datasets, EITI reports, national statistics and government reporting.

The Ghana extractives dashboard visualises for CSOs, journalists and policy makers the impact of extractives on the economy by providing visualizations and a macro level overview.

In the future, as more data becomes available, it could also provide granular detailed breakdowns of project activities.

## Overview

You can navigate through the site by clicking on the green buttons at the top of the screen. These will slide down to the relevant panel according to your selection.

Below each graph, you will find notes and important caveats; sources; and a button to download the related raw source data.

## Commodities

The commodities section shows the following graphs and visualisations:

### Aggregate trend analysis per commodity over time

Each line represents a commodity (gold, oil and gas, etc). You can hover over a line at a particular year to see the amount for that commodity in that year.

### Revenue by commodity and fiscal streams

The remainder of the commodities section drills down into data in a particular year. You can use the slider to choose the year you are interested in; all of the remaining graphs in the commodities section will be updated according to your choice.

## Aggregate commodities

A semi-circle shows the proportion of revenue from each commodity for the year you selected above. You can hover over the segments to see the amount.

## Revenue streams by company (mining) and projects (oil and gas)

Two clustered bar charts show the breakdown of revenue streams by company, for the year you selected above. Mining companies are shown on the left, and oil and gas projects are shown on the right. You can hover over a segment to see the revenue from that company and revenue stream.

## List of companies (mining) and projects (oil and gas)

Companies are listed in order of total revenue contributions, including the relevant commodity. You can click on the name of any company for detailed data on that company's revenue contributions below. The page will automatically slide down to show you the company panel.

## Companies

You can select a company by clicking on the drop-down box on the right-hand side of the page. Narrative information about the company or project and a line graph showing the trend in revenue stream per project will be updated according to your selection.

## Production

The map displays the total production volume per company or project per year. You can use the slider at the top of this section to select the year you are interested in. The map will be updated according to your selection.

The circles are coloured according to the commodity. By default, oil and gas is not shown, because the amounts are much larger than the other commodities. You can choose to enable or disable particular commodities from view by clicking the check boxes from the top-right options box.

Clicking on a circle will provide more detailed information on production at that site, including the name of the company (or project), the location, and total production

volume. If you click on the name of the company (or project), the company panel (above) will be updated and the page will scroll up to show detailed information about that company.

## Revenues

This panel shows the trend of extractives revenues and general government revenue over time. You can hover over a line at a particular year for the amounts in that year.

## Data

All the data used to generate the graphs and visualisations on the dashboard can be downloaded. You can click the button underneath each visualisation to see data associated with that visualisation, or see the full list of all datasets used at the bottom of the page.

The main dataset used on the site is “Disaggregated resource revenues”. This contains a detailed breakdown of revenues by company (or project), year and revenue stream. It also contains data on commodities and locations.

To explore this data, you can download the dataset and open it in Excel. The dataset is saved in CSV format; CSV files normally open easily in Excel. The easiest way to explore different slices of the data is to insert a pivot table using the data. In Excel 2010 and above, you can use the following steps:

- Click anywhere on the data
- Select “Insert”, then “Pivot Table”, from the Excel menu, at the top of the screen
- Click “OK” to insert the pivot table in a new worksheet

You can then explore the data by dragging fields to **Columns** and **Rows**, and the `value` field to **Values**. For example, to see a breakdown by region, you can follow these steps:

- Drag the field `region` to **Rows**, and then `value` to **Values**. Click on the “i” symbol next to `value` and change the **Summarize by** selection from `Count` to `Sum`. This will show you the total value in all years in different regions.
- You can also drag the field `year` to **Columns**, and see the breakdown by region per year.
- Alternatively, if you moved the field `year` to **Filters**, then you can choose a particular year (or years) to filter by – e.g., to only show data for 2013.