BGR data

The Federal Institute for Geosciences and Natural Resources, or BGR, is a German Agency which publishes data on oil and gas resources and reserves. BGR data can be accessed here. This data is useful because resources and reserves are broken into their unconventional sub-components such as shale gas, tight oil, and coalbed methane. This is important in initializing total resources and reserves in the model, especially with the rise in unconventional gas and oil production in North America.

Series pulled from BGR

SeriesEnCumProdGasBGR
SeriesEnCumProdOilBGR
SeriesEnReserCBMBGR
SeriesEnReserGasBGR
SeriesEnReserHeavyOilBGR
SeriesEnReserOilBGR
SeriesEnReserOilSandsBGR
SeriesEnReserShaleGasBGR
SeriesEnReserShaleOilBGR
SeriesEnResorCBMBGR
SeriesEnResorGasBGR
SeriesEnResorHeavyOilBGR
SeriesEnResorOilBGR
SeriesEnResorOilSandsBGR
SeriesEnResorShaleGasBGR
SeriesEnResorShaleOilBGR
SeriesEnResorTightGasBGR

Instructions on importing BGR data

Process of importing and blending:

In preparing these series, I first downloaded the relevant energy reports from the BGR website, or are available through a google search of "BGR Energy Resources [YEAR]". I then exported the appropriate tables from these PDFs into separate excel sheets. Next, I broke these excel sheets down into the individual series, each of the 17 series onto its own excel sheet.

Each one of these 17 sheets has tabs for raw data for each year, formatted data for each year, and data for import (including data for all years). The [YEAR] tabs have the raw data

pulled from the two Energy Study excel sheets. The [YEAR] Formatted tabs have the same data as the [YEAR] tabs, only it has been formatted into a IFs-compatible format. The Data for Import tab has these two years combined.

Finally, I took all the Data for Import tabs from the 17 sheets and combined them into one sheet (Energy Series Final Version for Import). I then imported all series into Ifs from this sheet. Once I imported the data into Ifs, I blended the series with the existing data and exported all the series to the Access table "Imported Series" in folder "Imported Series".

Some notes on the formatting process:

In 2014, term changed from Shale Oil to Tight Oil (applies to Series EnReserShaleOil and EnResourceShaleOil) not to be confused with Tight Gas.

Table numbers don't stay the same over different years in the energy reports.

Differences between resources and reserves: "...[That] part of a mineral resource, which has been fully evaluated and is deemed commercially viable to work, is called a mineral reserve [in effect, resources will always be larger than resources]" In effect, resources shouldn't change over time, while reserves can.

-Source: http://www.bgs.ac.uk/mineralsUK/mineralsYou/resourcesReserves.html; Accessed 3/6/16

Sudan and South Sudan: Most of the time, BGR lists reserve and resource values for "Sudan" and "South Sudan" individually. On occasion though, BGR will use "Sudan and South Sudan" as a composite, representing aggregated data for both of the countries but not providing it on an individual basis. This is rare, and only takes place in series EnReserGasBGR and EnResorGasBGR. In these cases, I calculated the values for "Sudan" and "South Sudan" by taking the value of "Sudan and South Sudan" and dividing it by the ratio of land mass between Sudan (728,215 sqm) and South Sudan (239,285 sqm). Also, per Steve Hedden, we don't enter values for Sudan in the series EnCumProdGas and EnCumProdOil.

Another issue that needs mentioning is BGR's usage of dashes ("-") in its Energy Reports. Dashes are intrepreted as 0's based on the definition given by BGR in the Energy Reports.

BGR occasionally uses "n.s." in its data, which is intrepreted as a null value. In the German translation, "k. A." is used instead of "n.s.".

If there is a less than sign in the data, it is dropped and the value preceding it is entered as is. Ex. <0.05 is entered as 0.05.

Reference Data: *Listed below is each BGR series I updated, all with the name of the table in the Energy Report pdf, and the column of the table used.*

1. EnCumProdGasBGR: uses table Natural Gas in XXXX (year), column Cum. Production
2. EnCumProdOilBGR: uses table Crude Oil in XXXX (year), column Cum. Production
3. EnReserCBMBGR: Coalbed Methane Reserves. Table Natural Gas Resources (under CBM)
4. EnReserGasBGR: Uses table Natural Gas in XXXX (Year), Column: Reserves
5. EnReserHeavyOilBGR: Uses table Crude Oil Reserves, Extra Heavy Oil column
6. EnReserOilBGR: Utilizes table Crude Oil in XXXX (year), column Reserves

7. EnReserOilSandsBGR: Uses table Crude Oil Reserves, column Oil Sand
8. EnReserShaleGasBGR: Uses table Natural Gas Reserves, column Shale Gas
9. EnReserShaleOilBGR: Uses table Crude Oil Reserves, column Shale Oil
10. EnResorCBMBGR: Uses table Natural Gas Resources, column CBM
11. 11.EnResorGasBGR: Uses table Natural Gas in XXXX (year), column Remaining Potential
12. EnResorHeavyOilBGR: Uses table Crude Oil Resources, column Extra Heavy Oil
13. EnResorOilBGR: Uses table Crude Oil in XXXX (year), column Remaining Potential
14. EnResorOilSandsBGR: table Crude Oil Resources, column Oil Sand<ol style="list-style-type: lower-alpha;"
15. EnResorShaleGasBGR: table Natural Gas Resources in XXXX, Column Shale Gas
16. EnResorShaleOilBGR: table Crude Oil Resources, Column Shale Oil
17. EnResorTightGasBGR: table Natural Gas Resources, column Tight Gas

---