

# Extracting Extractive Data

*drawing insights from the Extractive Data Portal*



**Jakarta, August 7<sup>th</sup> 2018**



# We got a glimpse on what Extractive Data Portal is



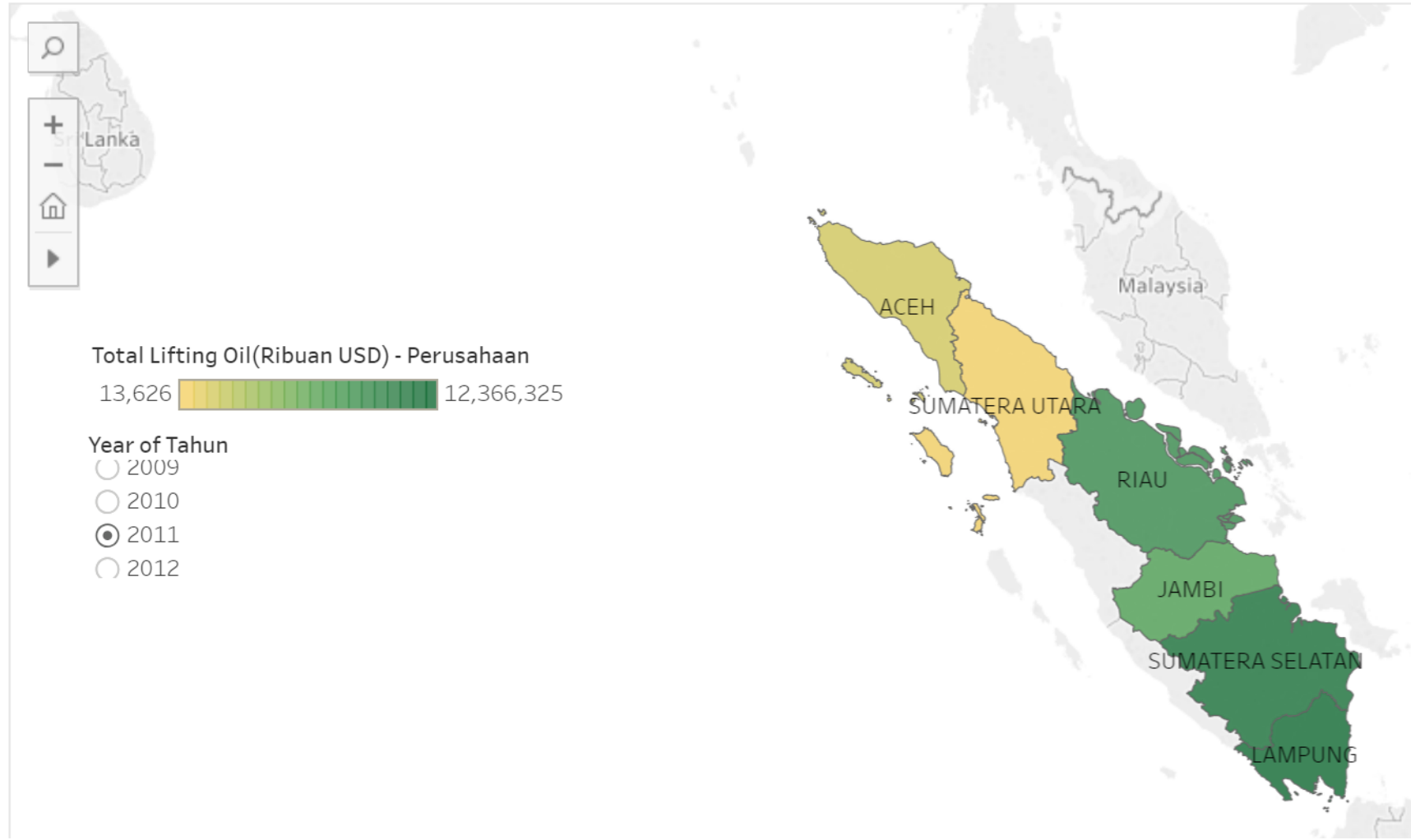
**But how can we  
get something  
out of it?**

# The Principle

- 1 Define the problem
- 2 Make informed guess
- 3 Crunch the data
- 4 Put a story around the crunched data
- 5 Let others know what you have done (and go back to No. 1)

# Example 1 – Oil Lifting in Sumatra Dashboard

Sumatra Total Lifting Oil (in Thousands USD) 2014

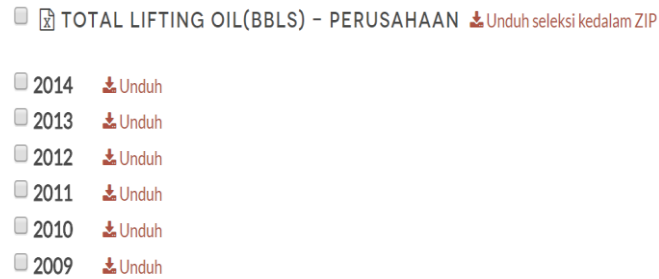


Link: <http://bit.do/liftingsumatra>

# Example 1 – How do we do it?

| THE PRINCIPLE                               | ACTION  |
|---|---|
| <b>Define the problem</b>                   | The policy makers have been discussing on the declining oil production in Indonesia. We would like to know how the trend is in Sumatra, home of oil producing regions   |
| <b>Make informed guess</b>                  | Oil production is indeed declining though Riau remains major producer   |
| <b>Crunch the data</b>                      | Extract the Oil Lifting per Company from 2009 – 2014 and aggregate it per Province, while only visualizing the Sumatran part of the data  |
| <b>Put a story around the crunched data</b> | What would be the implication of declining oil production, especially in provinces that rely its income solely on oil? The story is getting interesting if we analyze the public investment these provinces have been doing over the past few years and measure the outcomes of those investment. |
| <b>Let others know what you have done</b>   | What would be the possible follow up after this analysis? Do you think putting education and health investment angle with this story can be a good start to build stronger narrative over oil money in the region?  |

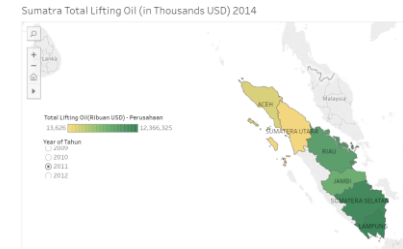
# Example 1 – More on data crunching



Extract Oil Lifting Data per Company from the Portal



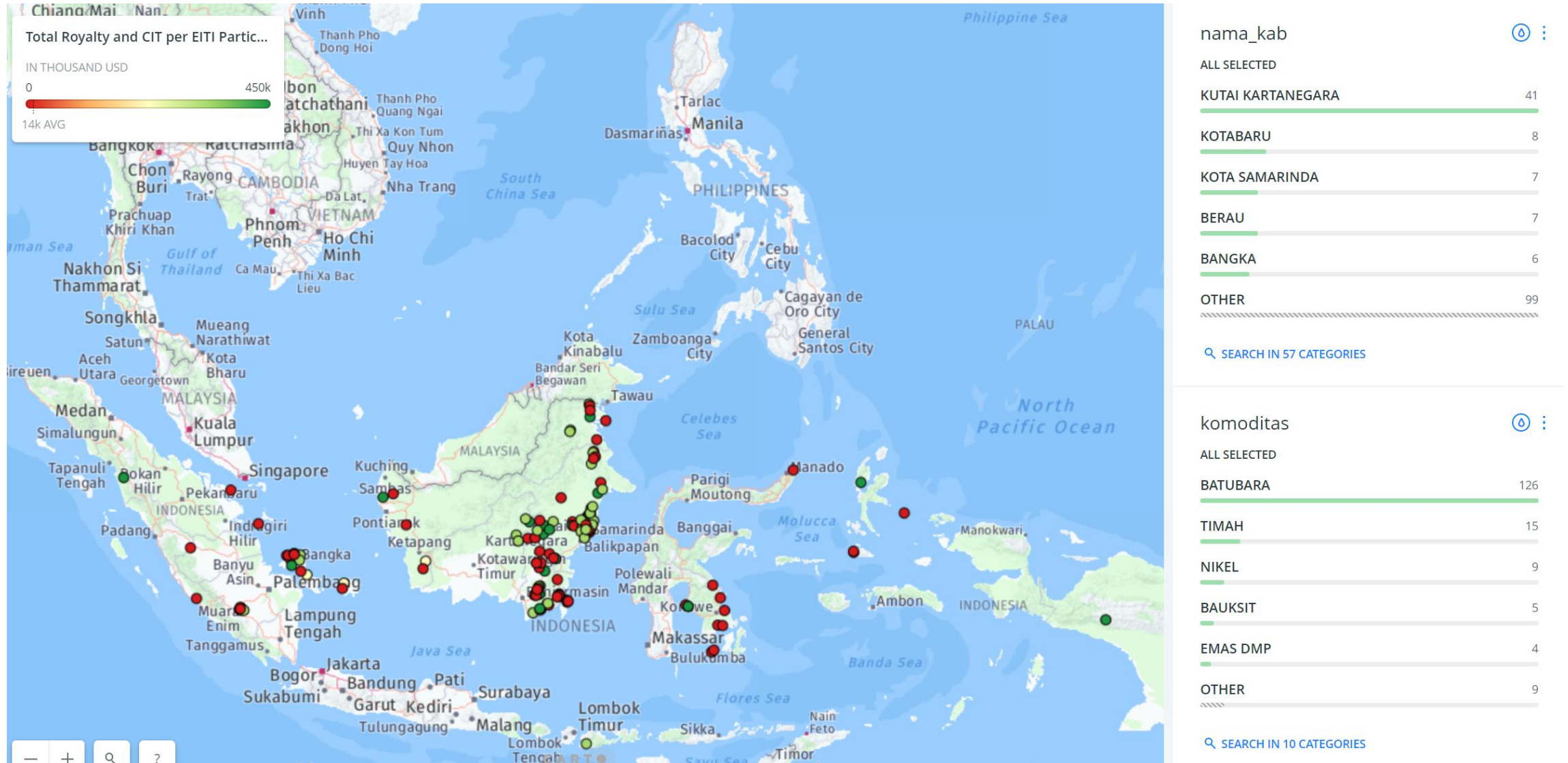
Clean and structure the data into flat time series file



Visualize the data using Tableau



# Example 2 – The EITI Reporting Companies Map



Link: <http://bit.do/eitimap>



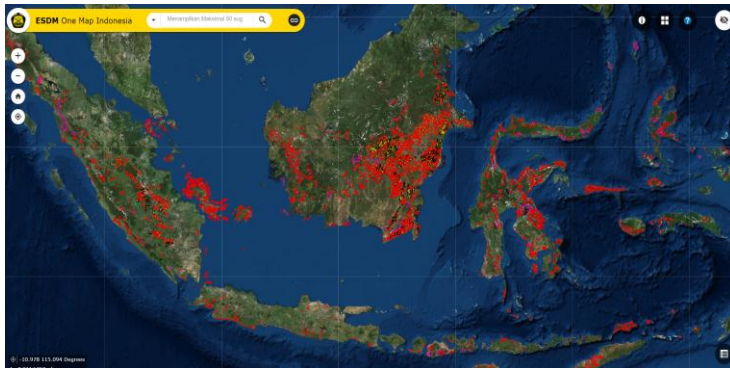
# Example 2 – How do we do it?

| THE PRINCIPLE                               | ACTION  |
|---|---|
| <b>Define the problem</b>                   | There seems to be great disparity of revenue among EITI reporting entities. Only really few companies that contribute to government revenue from mining   |
| <b>Make informed guess</b>                  | It seems that companies that operating in Kalimantan and Papua that contributes the most  |
| <b>Crunch the data</b>                      | Extract the royalty and CIT (Corporate Income Tax) per company data, merge it with ESDM One Map Data, and plot it into a map  |
| <b>Put a story around the crunched data</b> | After plotting the map as well, most reporting entities in EITI operate in Eastern Side of Kalimantan. What do you think the implication of this money-making companies to the environment in the Eastern Side of Kalimantan? |
| <b>Let others know what you have done</b>   | What would be the possible follow ups from the first round of this analysis?<br>What aspects would you like to deeper-dive?   |

# Example 2 – More on data crunching



Data from Portal: Deviden,  
Landrent, Royalti, PPh, PBB, etc



Geospatial Data from ESDM  
One Map



Merge Datasets



Visualize the data  
using Carto

# Example 3 – Kideco Jaya Agung Financial Model



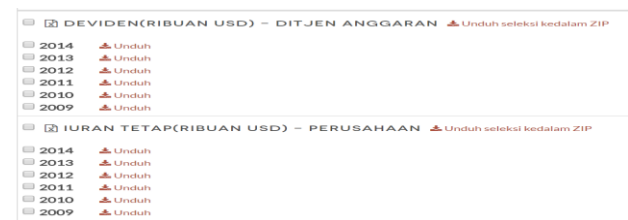


# Example 3 – How do we do it?

| THE PRINCIPLE                               | ACTION  |
|---|---|
| <b>Define the problem</b>                   | We would like to understand more how Kideco Jaya Agung (one of the largest coal producer in Indonesia) makes money, and how changes in coal price and fiscal regime affect company's performance and its contribution to state budget |
| <b>Make informed guess</b>                  | The company has been active in doing corporate action and this affects its payment to government  |
| <b>Crunch the data</b>                      | Using mainly corporate financial reports, international coal prices, local coal price, and EITI information especially PPh and PHT  |
| <b>Put a story around the crunched data</b> | The model can serve as a tool for policy makers when negotiate with companies and to better comprehend how changes in fiscal regime affect revenues from companies  |
| <b>Let others know what you have done</b>   | What would be the possible improvements for the model? How the model can be more accurate?  |



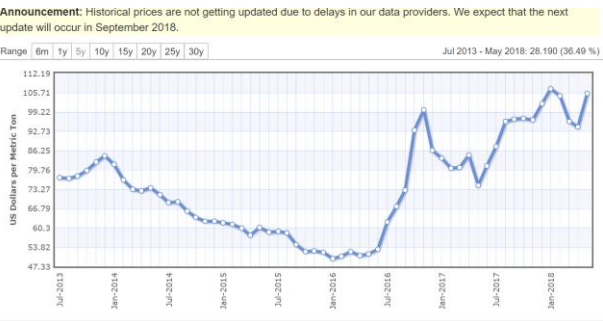
# Example 3 – More on data crunching



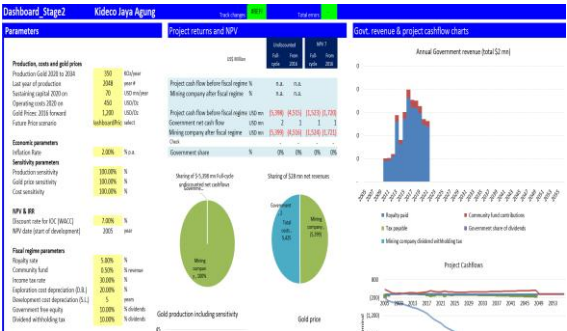
Data from Portal: PPh and PHT



Company's Financial and Annual Report



Coal Prices from various website and sources



Combine everything in the Model



Build the narrative to make sense of the model

# What can you do with Extractive Data Portal

- 1 Complement your data
- 2 Validate claims
- 3 Enrich the analysis and dashboard  
you build

# Some issues with Extractive Data Portal

- 1 Time lag
- 2 The universe of extractive datasets
- 3 Yes, it is complex

**Feel free to ask  
any question 😊**