

The background is a light blue world map with a grid pattern. Scattered across the map are several blue Twitter bird icons, the text 'CO2' in white, and various financial symbols including US dollar bills (one labeled '100'), gold coins with dollar signs, and a hand pointing at a '100' bill. There are also green leaves and a calculator visible at the bottom.

The Carbon Market Twitterverse

Sarah Daniels

Nov 2nd, 2022

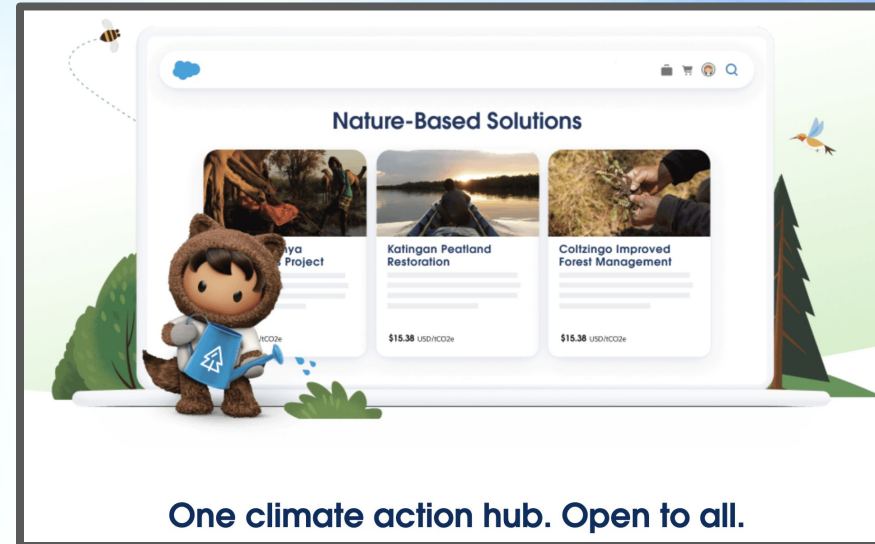
Prepared for Salesforce's Net Zero Marketplace Sales Team

Background | *Voluntary Carbon Markets & Net Zero Targets*

- Companies worldwide are committing “Net Zero” pledges
- Net Zero requires reduction/offsetting of carbon dioxide emissions
- The Voluntary Carbon Market allows organizations to buy “carbon credits” to fund environmental projects that offset their emissions

Client

- Salesforce launched first of its kind
“Net Zero Marketplace”
- Sales team requested help with language choices for marketing campaign



Data Description

Data Features

Tweet Text

Timestamp

Author ID

Context Annotation

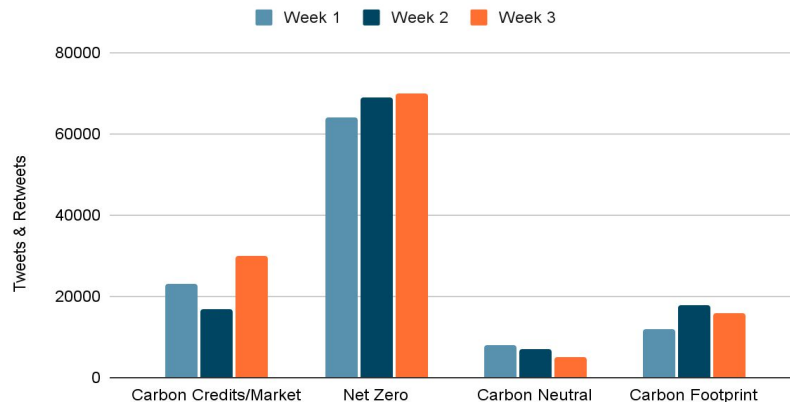
Retweet Count

Reply Count

Like Count

Quote Count

Twitter API Query Terms



Tweet Likes



Rep. Marjorie Taylor Greene
@RepMTG

Germany is using coal power again and abandoning climate scam energy while promising to end coal by 2030.

Just like China is burning more coal than ever while promising to be carbon net zero by 2050.

Face it, fossil fuels like coal actually keep the lights on and houses warm.

11:40 AM · Oct 11, 2022 · Twitter for iPhone

4,123 Retweets 297 Quote Tweets 16.8K Likes



Darren Grimes
@darrengrimes_

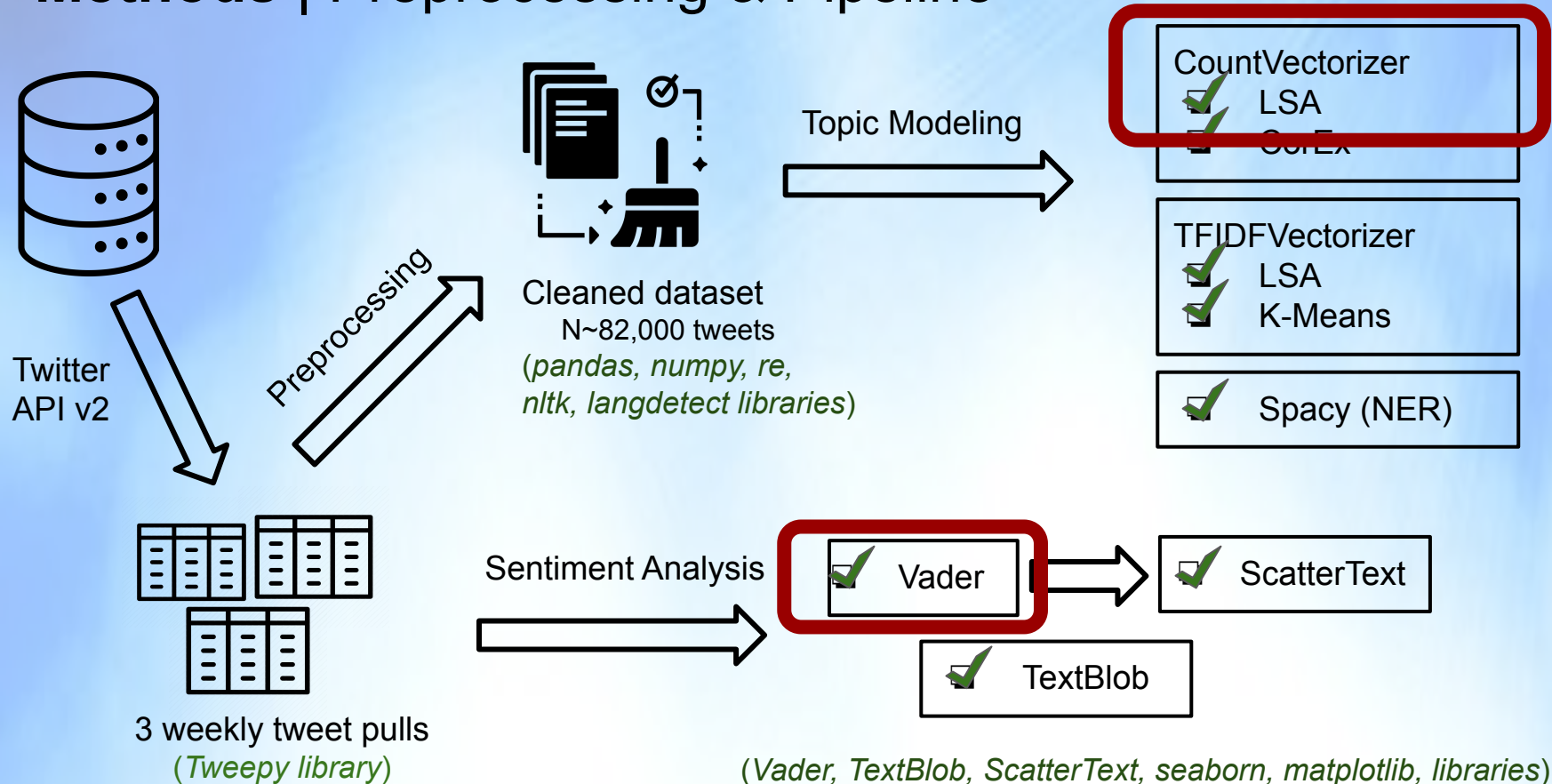
We haven't heard of threats of blackouts since the 1970s. I want people to consider that. Fossil fuels have kept us consistently warm and alive since then, a push for Net Zero to appease a group of extremists in a country that emits 1 per cent of global CO2 emissions. I'm angry.

11:32 AM · Oct 22, 2022 · Twitter for iPhone

1,350 Retweets 184 Quote Tweets 6,104 Likes

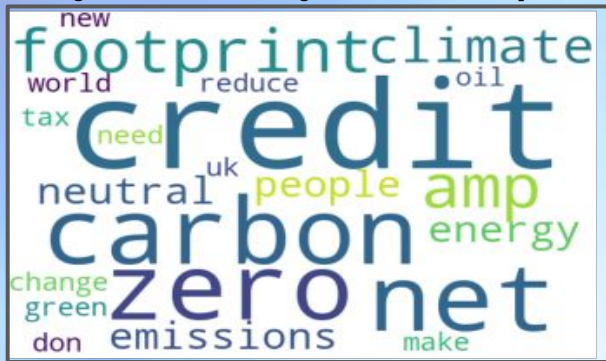
Methods | Preprocessing & Pipeline

(*sklearn, WordCloud, Spacy, libraries*)



Results | Topic Modeling | LSA w/CountVectorizer

Keyword Quality Control Topics



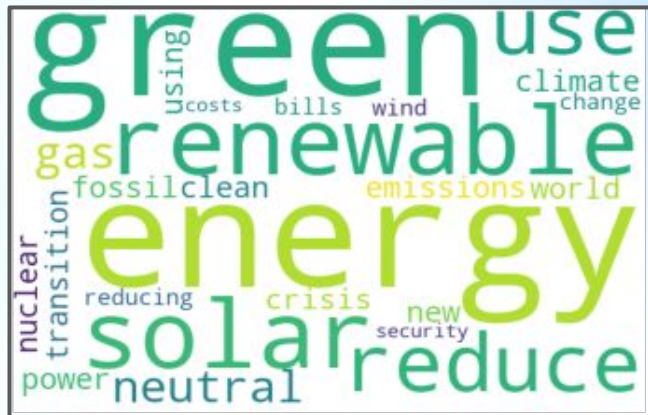
UK Politics



Crypto Tokens for Carbon Credits



Renewable Energy



Sample Tweets from Unexpected Topics

NET ZERO is a farce and you only back it because **Boris** did..

Now we know how **Boris** got the net zero bug.

sliding down the same net zero tunnel that **Boris** built for the Tories.

Sorting out the mess that Liz Truss and **Boris** left behind. Plus no carbon footprint

Boris promised much but delivered NOTHING.

, no tax cuts, uncontrolled immigration, covid fascism and overspending, net zero insanity, etc.**Boris** had to go.



The PAXW **token** runs on the carbon-neutral Polygon (MATIC) blockchain.

💚 The Impact Project is a green new project that uses their **token** to improve the state of carbon credits, and has thus far experienced huge success in their presale.

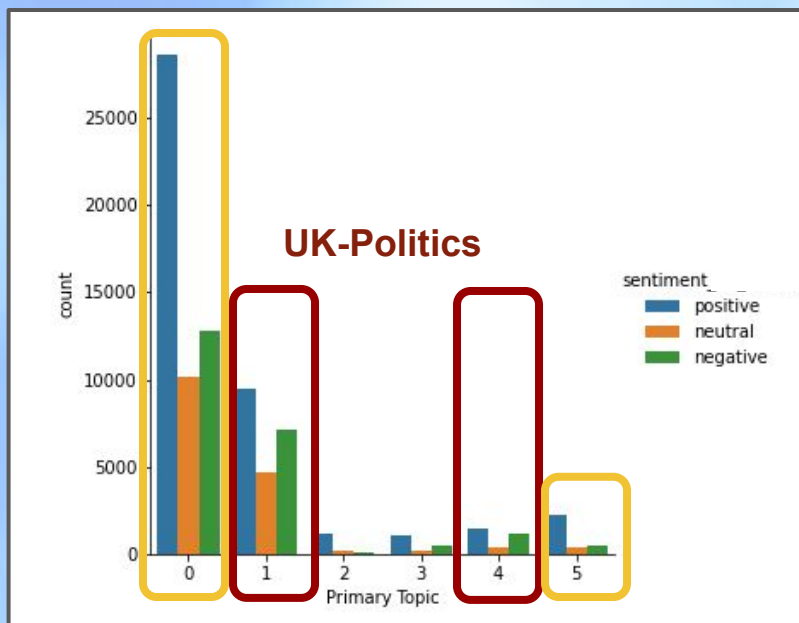
🛒 - a Web3 platform that allows consumers to trade carbon credits, raised \$5M in the pre-sale of its IMPT **token**.

Nature Carbon Tonne (NCT), web3's first open, pooled, nature-based carbon reference **token**, is now available for auto-buy in the Cask dApp on Choose a frequency & Cask auto-swaps 4U on Learn more about NCT and tokenized carbon credits 🍌

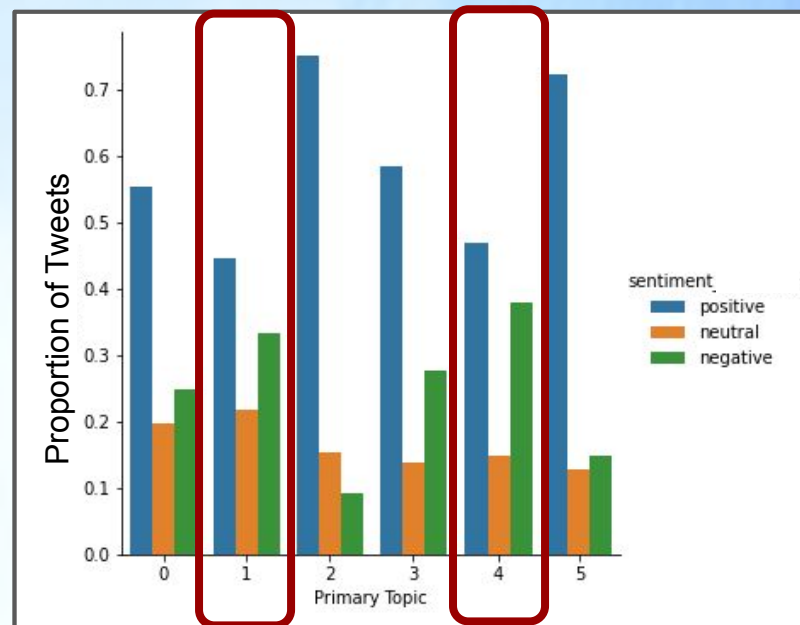


Results | Sentiment Analysis

Raw Count of Tweet Sentiments by Topic



Proportion of Tweet Sentiments by Topic



Conclusion

- Could be challenging to launch the Net Zero Marketplace Platform Sales in UK
- Engagement with moving carbon credits accounting to blockchain may be advantageous
- Heed caution for particularly controversial topics

Word Tokens	Context	Discovered by	ScatterText Token Score
Qatar (next month)	World Cup committing to carbon neutral event	K-means clustering	-0.025
WEF	World Economic Forum	LSA (UK Politics Topic)	-0.048
COP27 (next month)	United Nations Climate Change Conference	ScatterText	-0.006

Future Direction

Pull more tweets,
remove similar/
duplicates (ads)



Demonstrate changes in
controversial Net Zero
comments over time
(i.e., in UK)

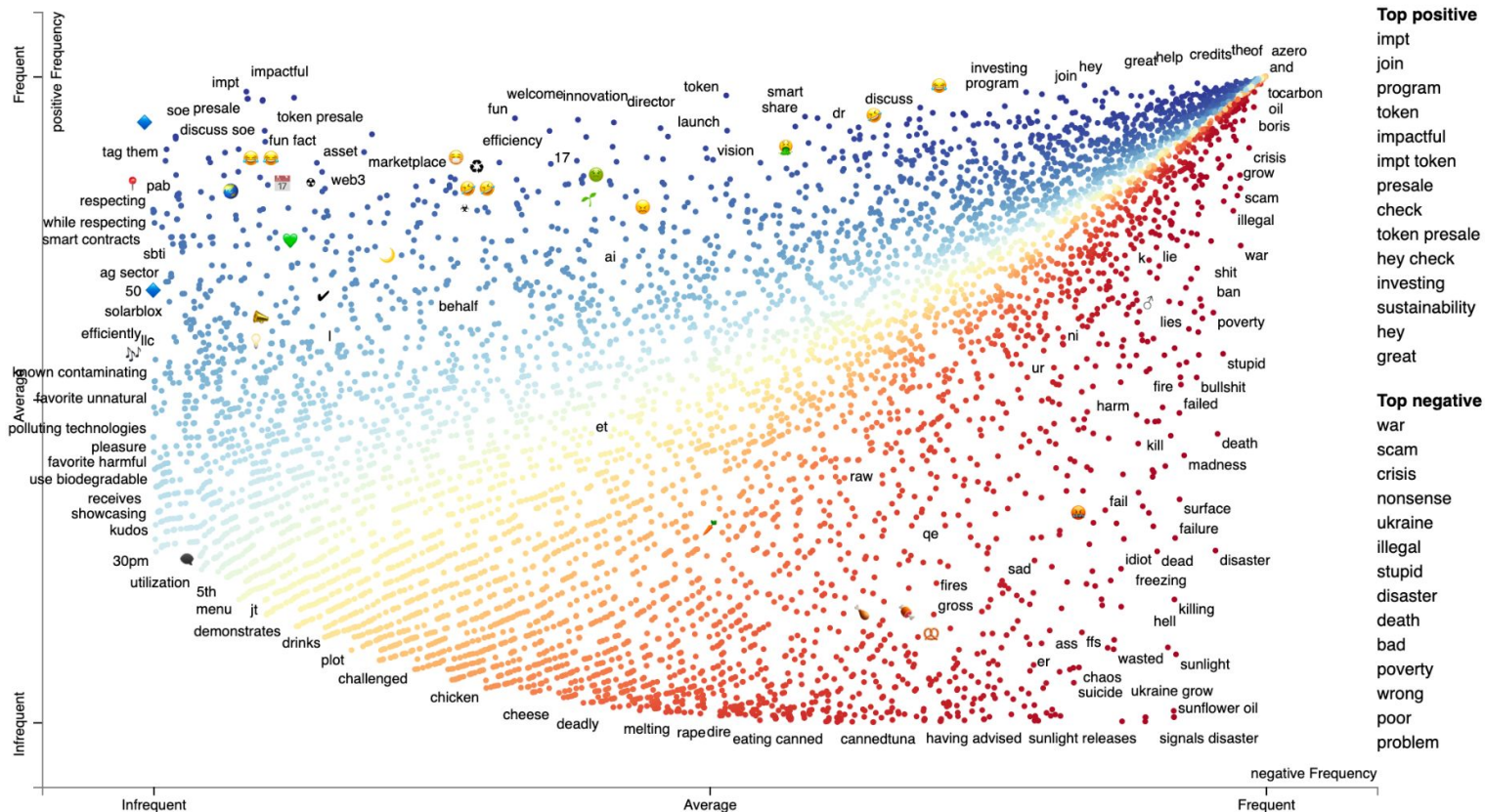


Develop a streamlined
pipeline for topic/sentiment
modeling with more advanced
clustering



Thank you

Appendix | Results | Sentiment Analysis



positive document count: 44,014; word count: 1,268,850

negative document count: 22,255; word count: 674,403