

Who owns what:
Investigating beneficial ownership
using knowledge graphs

Stephen Abbott Pugh



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Introduction

Four years as product owner of the Beneficial Ownership Data Standard, the world's leading open standard for structuring and exchanging high-quality beneficial ownership information.

Former head of technology at Open Ownership where I provided extensive support to governments, private sector companies and expert data users to understand beneficial ownership, use data and improve data quality.

More about my experience at beneficialownership.co.uk.



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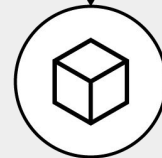
Ultimate beneficial ownership



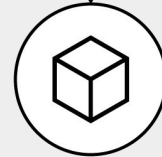
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Person A



Entity B



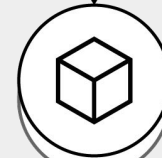
Entity C



Company D



Person A



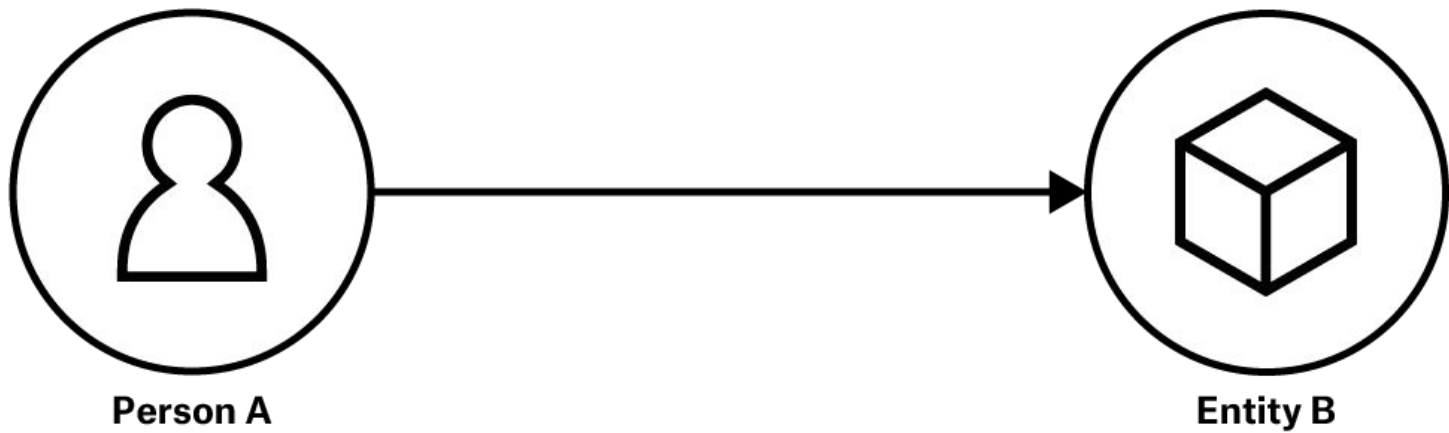
2 Entities



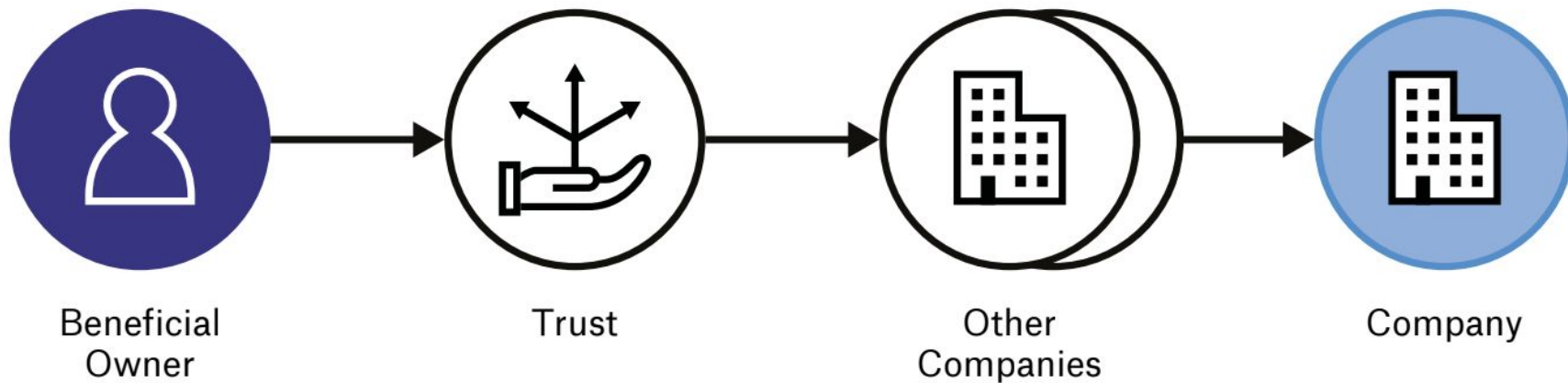
Company D

A **beneficial owner** is the natural person who ultimately **owns** a legal person (e.g. a company) or arrangement (e.g. a trust), can **benefit** from its operations and profits, or **control** its activities





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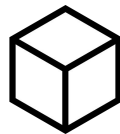


Explaining relationships between people and entities



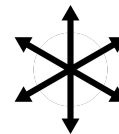
People

Information about the person(s) involved in an ownership or control relationship



Entities

Information about a legal person, arrangement or other corporate vehicle that people can own or control



Relationships

Information about the nature of the ownership or control

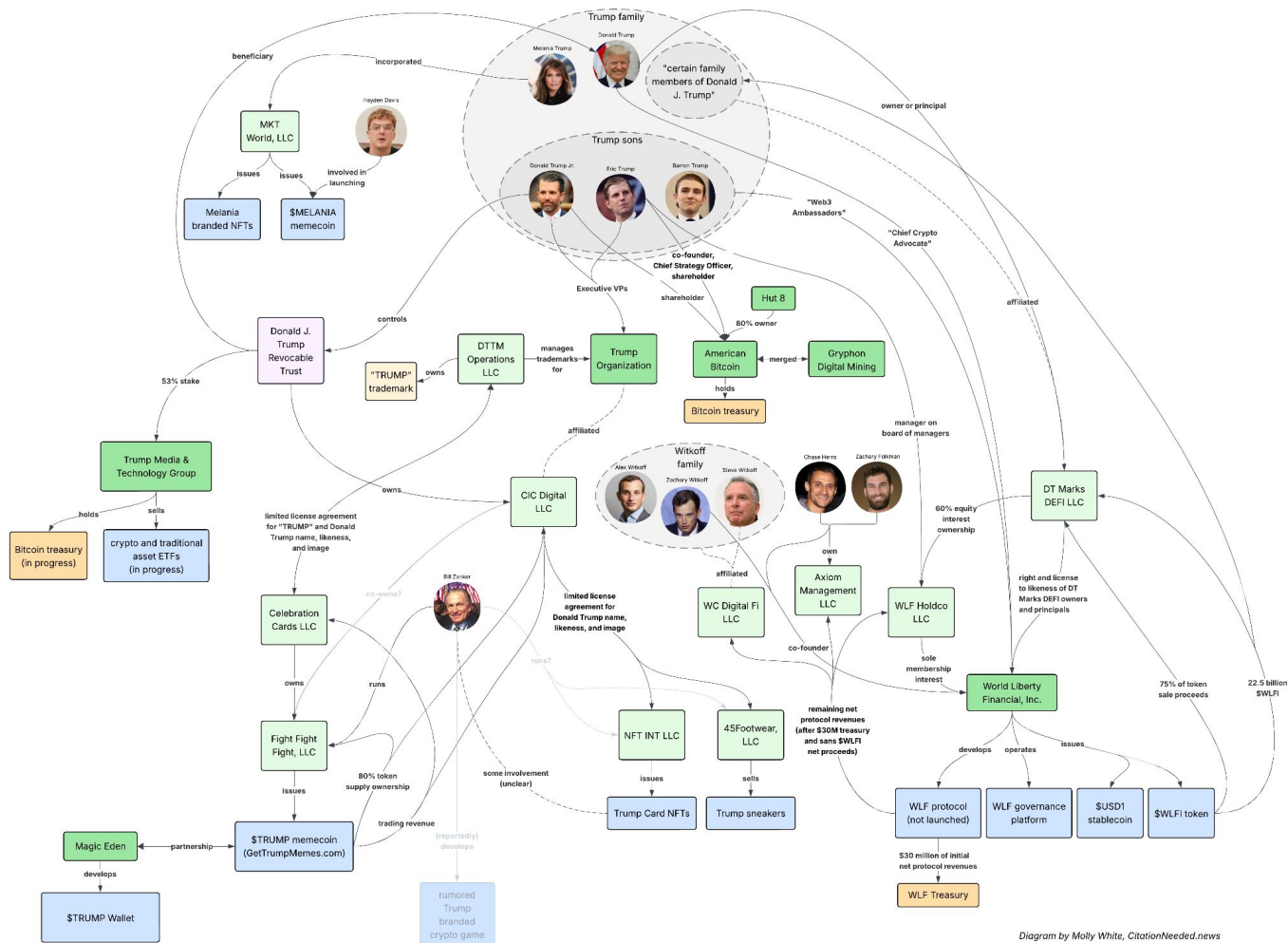


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Policy and legal challenges relating to UBO data

- Fragmented landscape in terms of legislation, adoption, enforcement and definition of beneficial ownership in different jurisdictions
- 2022 CJEU ruling on beneficial ownership and privacy
- Shift towards legitimate interest - not public - access
- Exploitation of legal differences and loopholes
- Tax havens and secrecy jurisdictions
- USA defunding and undermining transparency reforms





Unknown beneficial ownership



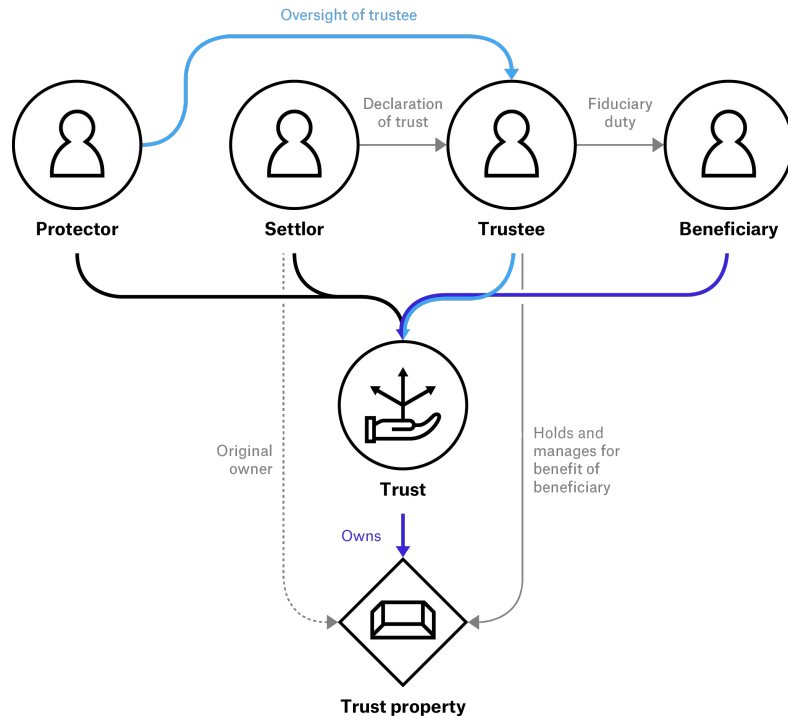
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Trusts

International rules from Financial Action Task Force, EU and OECD call for countries to collect information on a range of roles relating to trusts which may be held to constitute beneficial ownership:

- Settlor
- Protector(s) - if any
- Trustee(s)
- Beneficiaries / class of beneficiaries
- Any other natural person exercising ultimate effective control over the trust



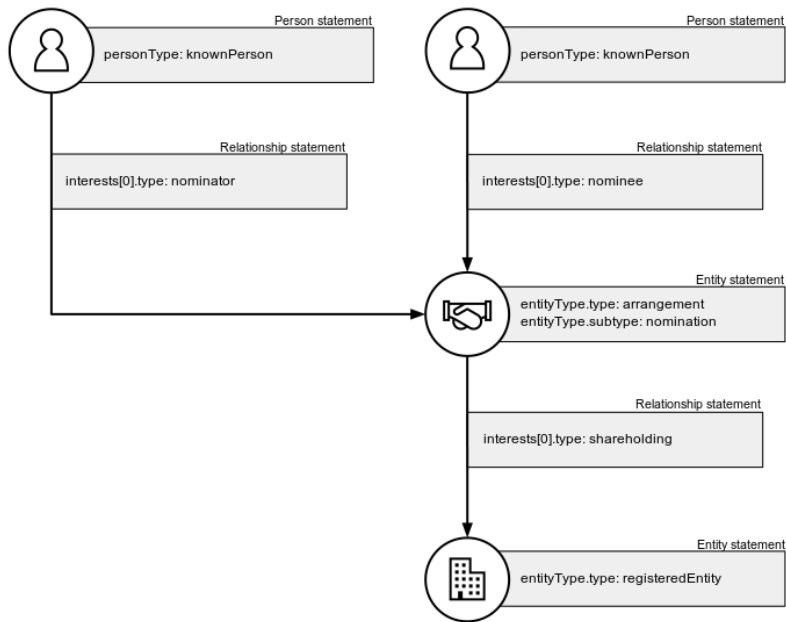
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Nominee relationships

Nominees are people who act on behalf of others to carry out official roles or responsibilities.

While many have legitimate purposes, nominee arrangements constitute a “major vulnerability in the ongoing campaign to curb the use of untraceable shell companies in financial crime”.

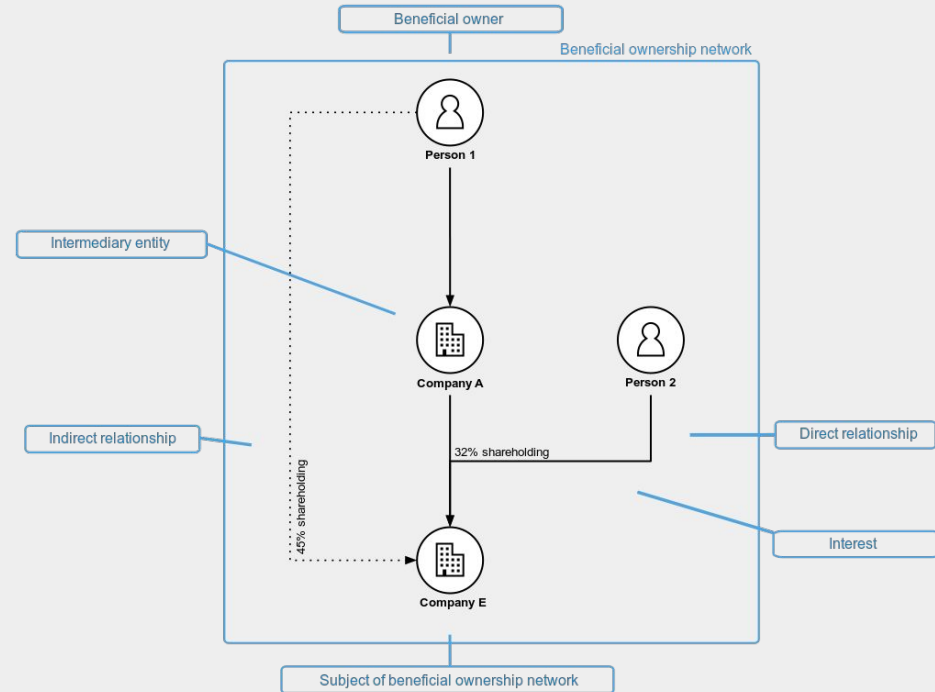
Nominators - not nominees - must be declared as beneficial owners.



Understand beneficial ownership

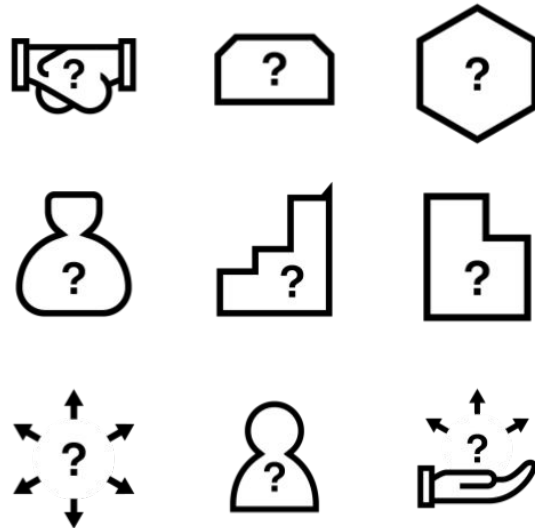


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The Beneficial Ownership Data Standard (BODS)

- A global **framework** for structuring and exchanging high-quality, usable beneficial ownership information
- Allows for capturing of data on **legal entities/arrangements**, nominee relationships, full ownership networks and a wide range of interests relating to how people **own, control or benefit** from companies/trusts
- Range of **open-source tools** available to visualise, analyse and use data



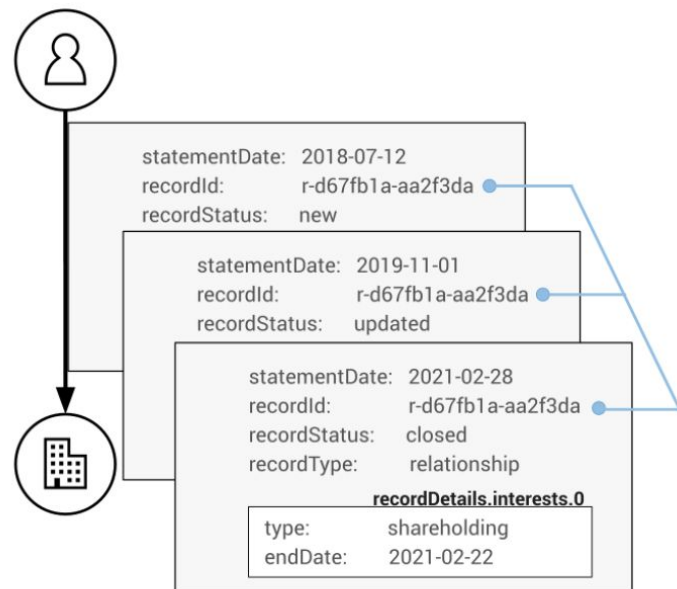
standard.openownership.org



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Explaining the BODS statement model

- Statements can be about a person, an entity or a relationship and each represents a claim made by a source at a point in time
- BODS aims to allow people to make sense of data received from multiple sources over extended periods of time
- Series of statements about the same person, entity or relationship linked over time using concept of a record and by a dedicated identifier (`recordId`)



Use beneficial ownership data



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GraphAware®

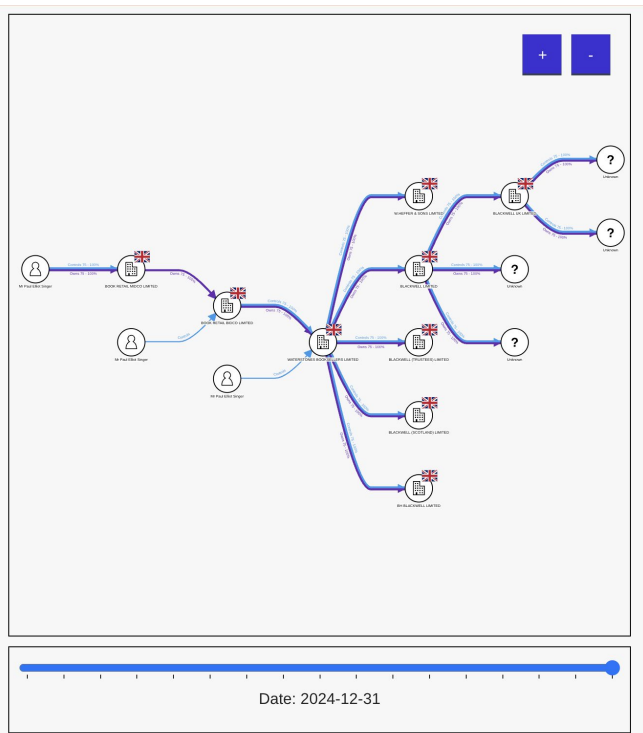
Beneficial ownership data helps...


- Improve trust in businesses
- Fight illicit financial flows and financial crime
- Support effective taxation
- Tackle procurement fraud
- Increase domestic resource mobilisation
- Enforce sanctions regimes
- Trace asset ownership back to people



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Exploring register entries and company networks






COMPANIES
AND INTELLECTUAL
PROPERTY AUTHORITY

PROTECTING BUSINESS INTERESTS

Protecting business interests

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Beneficial owners ▾

Name or UIN

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Beneficial owner status

Any status ▾

Interests

Any type ▾

Beneficial owner type

Any type ▾

Entity Status

Please select ▾

Appointment date

Any date ▾

☐ Show total number of results

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Ownership networks to trace corporate responsibility



A LANGUAGE ▾

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World's largest oil and gas plant owners hide billions of dollars in climate costs

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 Anna Mowat

 November 2024

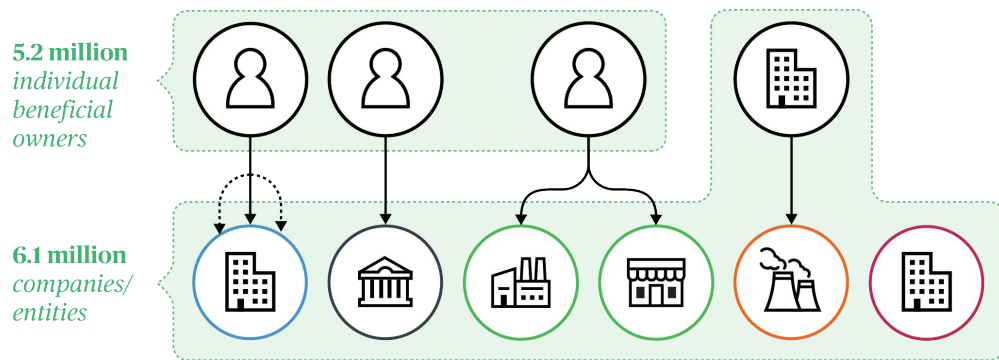
Saudi Electricity Company — the largest owner of gas-fired capacity in the world — did not disclose over 7 million tonnes of CO2 in 2022 through its chosen carbon reporting method, finds a new report from Global Energy Monitor about the failure of the world's largest oil and gas companies to properly account for their emissions.

For just five of the top companies owning oil- and gas-fired power plants, GEM found 10.7 million tonnes of hidden CO2 emissions for 2022. The [social cost](#) of this much carbon is \$2 billion in climate costs per year, or \$43 billion of the remaining lifetime climate cost of all hidden gas plants.



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Risk-based analysis and insights from national data



Key



6.5 million
relationships



14.2 million types of interests
(e.g. ownership, votes) within
relationships

20% of entities in UK register
don't declared any individual
people as beneficial owners

Some individuals appear as
beneficial owners in hundreds
or even thousands of entities

Around 20% of entities have
declared more than one
beneficial owner, with at least
one individual holding multiple
types of interests



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Spotting risks using procurement and ownership data



Government
Transparency
Institute

Research Projects

Publications ▾

Using beneficial ownership data for large-scale risk assessment in public procurement. The example of 6 European countries

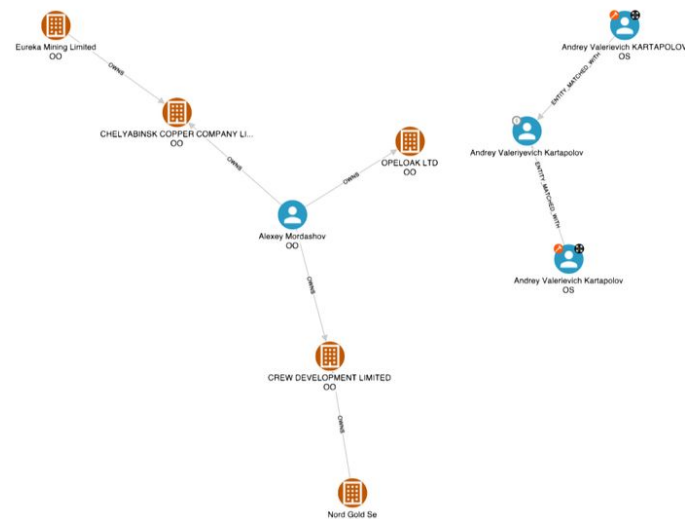
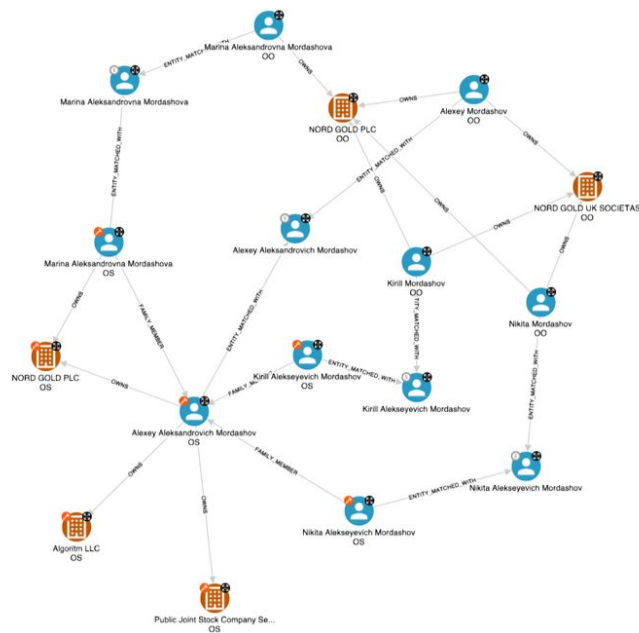
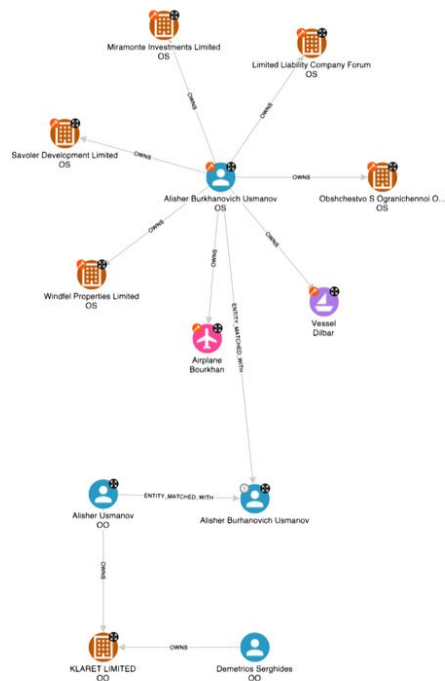
 July 5, 2024  Working papers

Arista, Irene Tello; Fazekas, Mihály & Volkotrub, Antonina (2024), Using beneficial ownership data for large-scale risk assessment in public procurement. The example of 6 European countries. GTI-WP/2024:02, Budapest: Government Transparency Institute



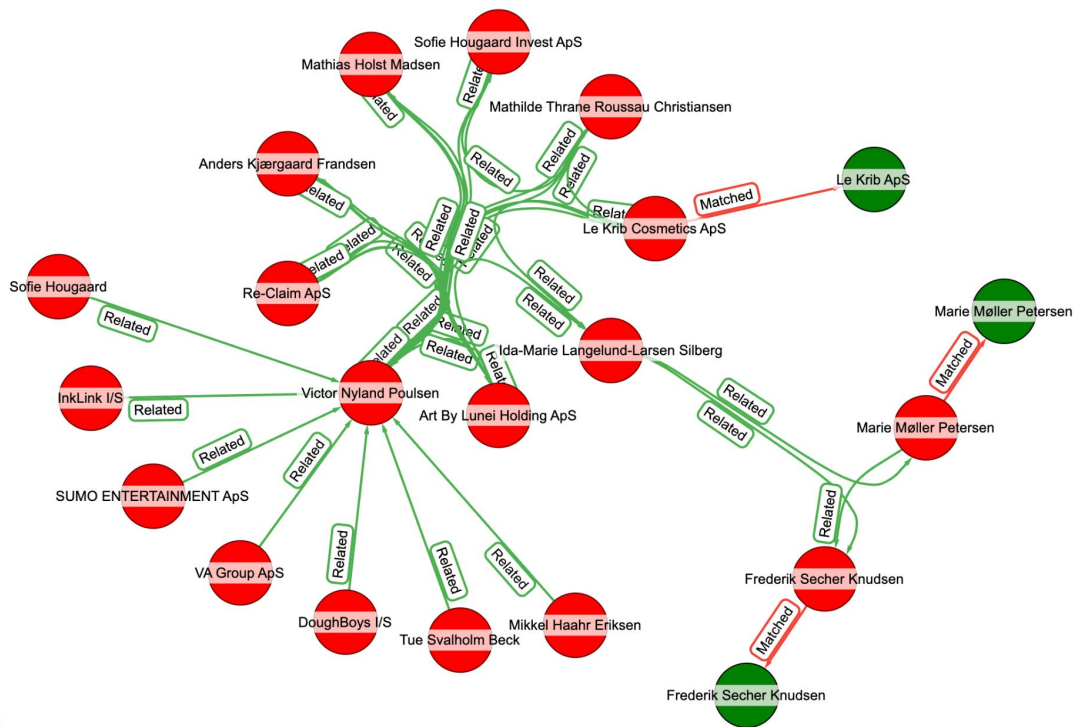
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Spotted sanctioned people/PEPs who own companies



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Create high-quality knowledge graphs - Kuzu + Senzing



Interpreting + using beneficial ownership data as RDF

Beneficial Ownership Data Standard v0.4

Metadata

IRI

<https://vocab.openownership.org/terms>

Title

Beneficial Ownership Data Standard v0.4

Description

The RDF vocabulary for the Beneficial Ownership Data Standard v0.4

Classes

Address Type^c

IRI

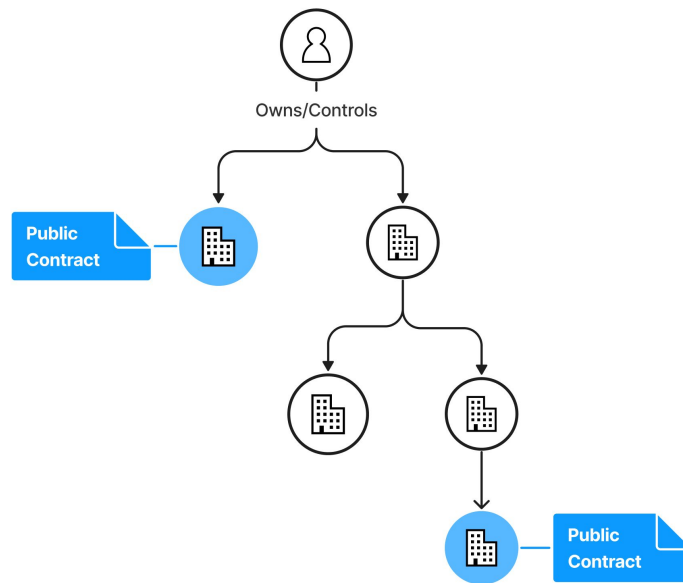
<https://vocab.openownership.org/terms#AddressType>

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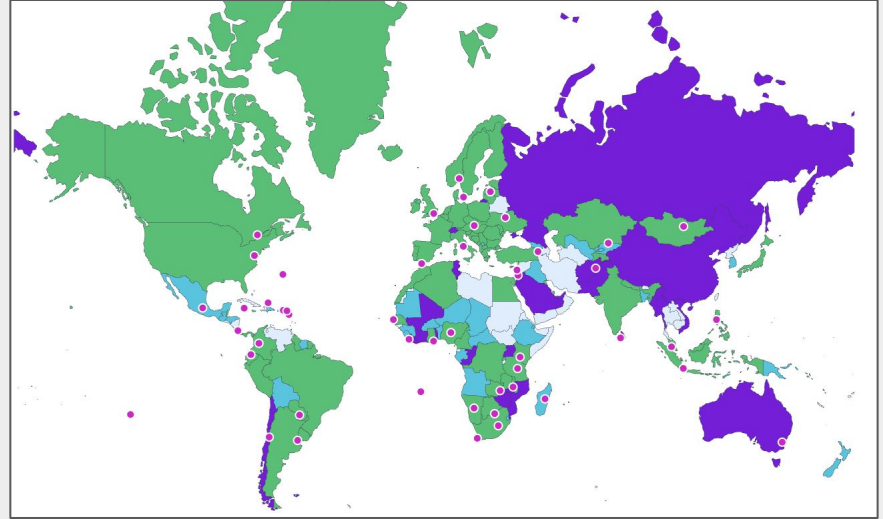


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Uncovering beneficial ownership data



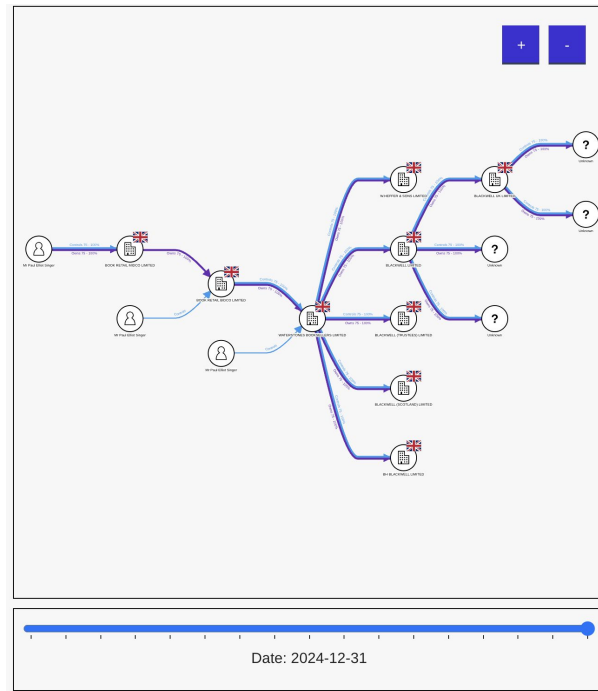
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Public BODS datasets republished by Open Ownership

Datasets featuring more than 12m entities in standardised BODS format:

- [United Kingdom](#)
- [Denmark](#)
- [Slovakia](#)
- [Latvia](#) (historical)
- [Global Legal Entity Identifier Foundation](#) - parent/child company relationships



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Places to get public beneficial ownership information

Europe

- [France](#) (legitimate interest)
- [Denmark](#) (legitimate interest soon)
- [Latvia](#) (historical)
- [Slovakia](#)
- [United Kingdom](#)
- [Norway](#) (legitimate interest)

International

- [Canada](#)
- [Nigeria](#)
- [ICIJ's Offshore Leaks database](#)
- [Armenia](#)
- [Botswana](#)
- [Indonesia](#)



Places to search corporate/beneficial ownership data

Free/open

- [OpenCorporates](#)
- [Global Legal Entity Identifier Foundation](#)
- [OpenSanctions](#)
- [Global Energy Monitor](#)
- [Global Media Registry](#)
- [DARC Library](#)

opencorporates



Global Energy Monitor



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