# Countering global oil theft: impact and solutions

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#### UNU-WIDER VIDEO ON OIL THEFT

https://www.youtube.com/watch?v=gWhy-DsvK M

#### **UNU-WIDER Report 1:**

Global oil theft: impact and policy responses

https://doi.org/10.35188/UNU-WIDER/2022/147-1

#### UNU-WIDER Report 2:

Countering global oil theft: responses and solutions

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# A sample of the discovered / reported oil thefts

**Europe** fuel fraud causes **US\$4 bln / yr** in lost taxes

Turkey fuel smuggling at 2.7 mtpa costs US\$2.5 bln / yr

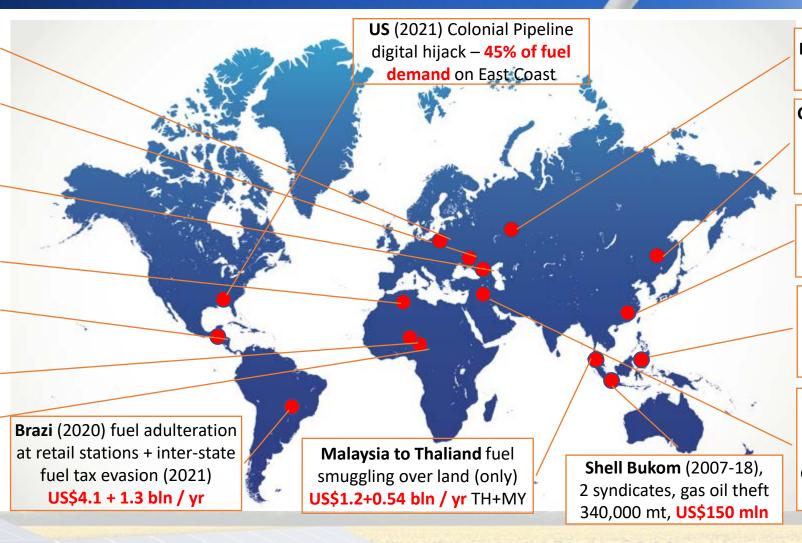
**Syria** (2015) ISIS illegal oil refineries sold to brokers at **US\$40 mln/month** into Turkey and to Assad regime

Algeria fuel smuggling costs US\$1.3 bln per year (2013)

Mexico fuel theft, 12,500 illegal taps (2018) US\$3 bln/yr

Benin 80% of fuel demand is smuggled from Nigeria, cost U\$\$863 mln/yr (2010)

Nigeria theft 400,000 bopd (US\$12 bln per year), +1 mln bopd shut-in with US\$20 bln/yr tax deferred



Russia (2013) companies lose US\$1.8-3.5 bln/yr oil theft

China (2015) 250 people from 2 crime syndicates arrested for illegal import of untaxed fuel worth US\$355 mln

China (2021) illicit trade and sales of light cycle oil (LCO) avoids taxes US\$3.9 bln / yr

**SEA** (2011-15) 42 tanker hijacks for siphoning of oil/fuel; SEA illegal maritime fuel trade **US\$10 bln / yr** 

Iraq UN oil-for-food program (1996–2003) corrupted by 2,200 companies from 66 countries, kick-backs to Sad'm Hussein regime US1.8 bln



### Oil theft observations

- Oil theft is a global phenomenon, not just a developing country problem
- The scale of oil theft is immense: \$133 billion / yr, but indirect loss is much greater
- Modalities vary greatly: piracy, theft and extortion under violence, 'accounting' theft, artisanal refineries, smuggling, fuel adulteration, meter tampering, tax fraud schemes, bribery and corruption, digital hijacking and ransomware, ...
- Oil theft occurs across the supply chain
- Oil theft follows distinct patterns, e.g. from opportunity crime to organized crime



#### The various modalities of oil theft

## Oil theft syndicates are formed in various ways:

- by aligning theft activities by companies or their employees
- existing crime organizations diversify their criminal activities to include oil theft
- to finance war efforts or political independence struggles
- as a means re-appropriation of wealth and as a form of protest ('moral economy')



#### Jail for former Shell employee who masterminded S\$128m marine fuel heist at **Pulau Bukom**



Mexico's drug cartels, now hooked on fuel, cripple the country's refineries

MEND fighters and hostages in Nigeria



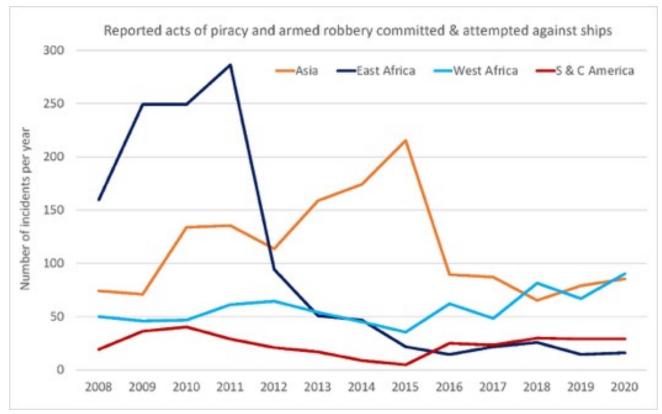




# Oil piracy cripples Benin economy

Shifting geographical patterns of maritime piracy and armed robbery at sea, 2008–20

- Oil theft causes regional insecurity
- In 2011, 22 pirate attacks were conducted off the coast of Benin, mainly targeting oil product tankers
- Maritime insurance companies reclassified
  Benin as high risk and insurance premiums for ships rose drastically
- Consequently, Port of Cotonou traffic declined by 70%, causing government revenues to fall by at least 28% in 2012
- Benin does not produce any oil and has very little official fuel imports



**Note**: the graph above shows piracy and armed robbery incidents against all types of vessels, including tankers.

**Source**: author's elaboration based on various IMO piracy reports.



# Oil theft causes great harm to health and the environment

- Adulterated fuels impair engines and cause increased emissions
- Oil pipeline taps cause significant leakages and soil contamination
- Oil pipeline taps regularly cause fatal explosions
- Artisanal (bush) refineries cause enormous harm

An example of an artisanal refinery in Nigeria













Source: images by Stakeholder Democracy, taken on 21 and 27 November 2012, reproduced from Flickr.com under CC BY-NC-ND 2.0

Source: courtesy of Shell Nigeria

# Interlinkages between oil theft and organized crime groups

- Oil theft is lower risk and more financially lucrative than other 'hard' crimes; this facilitates natural progression towards more professional approach and larger scale oil theft
- To control larger portion of the supply chain (increase profits),
  oil thieves evolve into crime syndicate organizations
- Oil theft can be conducted to finance other criminal or destabilizing activity
- The skill sets required for oil theft and for other crimes overlap
- Oil smuggling routes/methods are often used to smuggle weapons, drugs, and for human trafficking
- Oil is often stolen / smuggled under arrangements with state organizations, eroding public trust
- Crime syndicates prefer to diversify their operations to manage their risks
- Hardening of competition between crime syndicates stimulates violence and crime-on-crime activities
- Illicit money flows from oil theft intersect with those used to fund other transnational crimes and terrorist undertakings

...tapping a Mexican pipeline of refined oil for only seven minutes could earn a cartel \$90,000\*



# Oil theft undermines the fabric of society

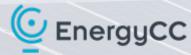
ISIS used oil theft to finance its terrorist wars Nigerian criminal groups involved often described their own activities as economically rational, politically necessary, morally defensible, and socially productive\*

Table 6: Mexico oil theft by market share (in 2016)

Rank	Organization	Market share (%)	Annual value of oil stolen (US\$ million)
1	Los Zetas	38.9	372
2	Jalisco New Generation Cartel	21.4	212
3	Gulf Cartel	16.3	187
4	Beltrán-Leyva	7.6	89
5	Sinaloa Cartel	6.3	74
6	La Familia Michoacana	2.5	29
7	Knights Templar	1.3	15
8	<u>Juárez</u> Cartel	0.7	8

Source: author's compilation of Atlantic Council report (Ralby 2017).

Crime-on-crime activities and turning local populations into sympathetic audiences for their cause are what make the activities of oil theft syndicates, criminal cartels, freedom fighters, and terrorist groups remarkably similar

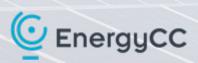


# Four key reasons for the low priority that the international community seems to give to actions against oil theft

- 1) It is seen as a domestic problem (mistakenly, as oil theft compromises the integrity of foreign markets and international financial systems)
- 2) The secretive and violent characteristics of this illegal trade render very difficult any intelligence-based action
- 3) The transnational organized crime networks involved are too flexible, mobile, creative, and diffuse to easily cut the illegal oil trade
- 4) Government officials are unenthusiastic about doing anything substantial to disrupt the illegal trade

Colombia's local economy disrupts when Venezuela lacks oil to smuggle





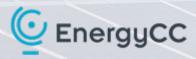
# Why countering oil theft is difficult, but necessary

- Oil theft is most common, yet it is also most covert
- There is a lack of basic data, including:
  - how much oil is stolen,
  - what the stolen oil movements are, and
  - how illicit oil transactions are conducted.
- Oil theft crime syndicates continuously show great flexibility to adjust their oil theft execution strategies and business models
- They know how to exploit gaps in transnational jurisdictions as well as the limited capacity in law enforcement to move to new targets and methods

A particular key concern is the mix of legal commercial operations with illegal oil theft activities.

Crime syndicates work under the cover of and with the support of legal businesses, insiders, and government organizations to provide them with technical/operational support, information, and business stability.

This not only facilitates oil theft and thwarts detection/clampdown but it also contaminates oil markets and financial markets with illicit oil and money.



#### International solutions to counter oil theft

#### **Stolen oil volumes**

- Designer tracers or markers for crude oil and fuels
- Protection of pipeline systems exposed to potential illegal taps
- Improved fuel and cargo management systems (including metering technology, measures to avoid meter tampering)
- Standards, regulations and enforcement practices across fuel bunkering value chain
- Discovering oil theft patterns through: data analytics, drone inspections, satellite imaging, remote radar detection
- Transparency on oil theft crimes (SPDC on oil spills, ReCAAP on oil tanker attacks).

#### **Stolen oil transport & trade**

- Inhibit incentives for fuel smuggling (fuel pricing policies, stop fuel subsidies)
- Targeted checks at strategic oil theft transportation choke points
- Maritime co-operation between domestic and international navies
- Data analytics on ship transponder signals, satellite detection of radar signals and emissions from ships.
- Steep penalties for manipulation of ship transponder signals (bar ships from ports
- Digital technology to limit manipulation of data (Singapore bunkering operations)
- Tamperproof business processes for third-party surveyor and certification

#### Stolen oil money

- Stringent regulation of cryptocurrency services to break the criminal links with off-the-book payments
- Anti-money-laundering activities: commercial banks as whistle-blowers
- Precise oil theft sanctions: 'do-not-trade' lists, bar vessel insurance, etc.
- Financial due diligence by banks that fund oil trading and bunkering co's liquidity
- Block chain technologies and non-fungible tokens (NFTs) can provide proof of authenticity of the origin
- A more active role of international courts
- Prosecution for bribery (FCPA)



# Discussion on opportunities for action and collaboration

#### Potential collaborating parties:

- Oil companies (Bunker companies: e.g. Trafigura and Mercuria)
- 2) Banks and other financial institutions
- 3) International legal associations
- 4) Business associations (international bunker industry association )
- 5) Government institutions (EITI, IMO, ReCAAP, UNODC, UNCTAD, MPA, RTF)
- 6) NGOs (TRACIT, One Earth Future Foundation, Basel Institute on Governance, Stable Seas)

Illegal fuels sold by bottles at the roadside in Bohicon Benin



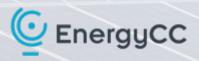


#### A call to action

#### Perhaps the most worrying impact of oil theft

- beyond the loss of stolen resources and the destruction of the environment from oil spills and artisanal refineries
- is the impairment of governments' ability to take care of their people and stimulate local development
- In several countries, oil theft syndicates are winning the hearts and minds of local communities
- by offering employment and cheap or free fuel and providing gifts and community services, such as paying for healthcare
- In such countries, oil theft is portrayed as a legitimate (if not legal) part of a moral economy.







WIDER Working Paper 16/2022 Global oil theft: impact and policy responses



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