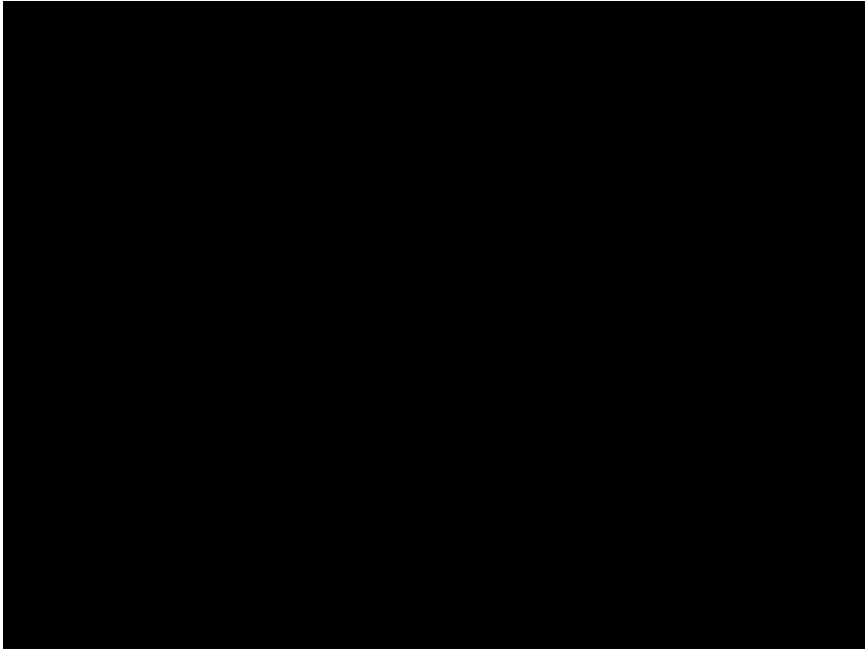


Speeding Up The Reporting Process For Tampered Energy Meters

Raising Awareness of Energy Theft in London and Simplifying The Reporting Process



Executive Summary



PROBLEM

Meter tampering (tampering with your electricity meter to change the recorded electricity used), costs the energy industry in the UK £500 million annually. There's an estimated 14% of households with a tampered meter. This adds up to 7 million estimated cases of meter tampering, but only 15k are reported each year.



SOLUTION

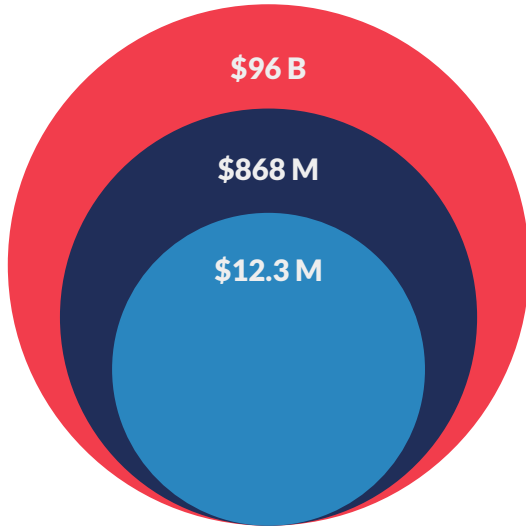
CrimeStoppers UK is a non-profit organization already working towards raising awareness about energy theft. We recommend Shell partners with them to speed up the reporting process, and continue to bring more attention to this issue.



IMPACT

With more people comfortable identifying and reporting tampered meters, the average impact of a tampered meter will reduce. Old meters will be replaced with new smart meters to make more tamper resistant. From this, we expect for Shell to make an additional \$12.4 million annually.

Meter Tampering Costs Shell \$12.4 Million Annually



\$12.4 MILLION

Meter Tampering costs the global energy industry \$96 billion annually. Since meter tampering changes the reported energy use of a property, it is often used to save money. Honest customers are forced to pay for the lost potential profit. Thus, Shell can recover the potential lost by keeping their price as normal, even once fraud rates are reduced.



GLOBAL COSTS

Globally electric meter tampering costs the industry \$96 billion annually.



UK COSTS

In the UK, meter tampering costs the industry \$868 million annually.



SHELL COSTS

Shell directly distributes to 741k customers in the UK. It's estimated that 14% of all meters are tampered with, each meter costs Shell ~\$124 annually. This gives Shell the opportunity to make an additional \$12.4 million annually.

London Has An Estimated 1.2m Tampered Meters

RUNNING A PILOT PROJECT IN LONDON BEFORE EXPANDING TO THE REST OF THE UK

To confirm assumptions and make sure the solution works, we will be starting out in London. All of Shell's recent acquisitions are based in the UK, but specifically close to London, we are assuming Shell mostly distributes to London.

- London is the UK's capital city, which makes it a fitting place to start. All of the recent distribution acquisitions Shell has made are all located near London. We are assuming this is where Shell distributes the most energy.
- London is the most highly populated city in the UK, it has just a bit over 7.5m citizens. Birmingham, the city right under is slightly shy of 1m.
- There's an estimated 1.2m tampered meters in London, this accounts for 17% of all tampered meters in the UK.

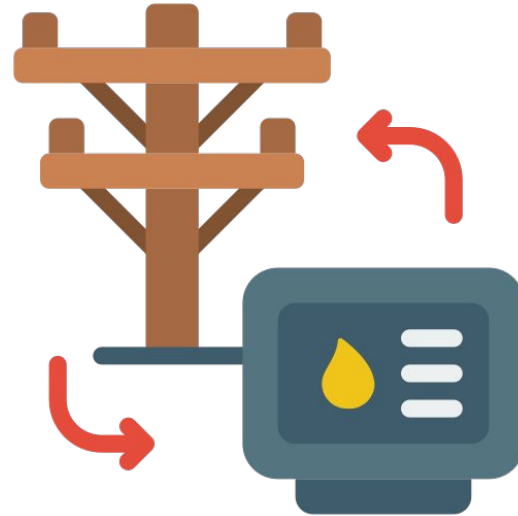


There Are 2 Incentives to Tamper With a Meter

WHAT ARE THE REASONS PEOPLE STEAL ELECTRICITY?

Anyone can tamper their electricity meter, but what incentivizes them to do so? There are 2 main reasons someone would tamper with their electricity meter. They both stem from the fact not as much electricity is recorded, but that is important for 2 different reasons.

- 1 Not having all your electricity recorded lowers the amount you need to pay in your bill since it makes it seem like you don't use as much electricity. Everyone who pays electricity could tamper their meter for this reason.
- 2 The amount of electricity used per meter is often automatically analyzed. This technique was used to identify illegal tobacco farms. Tampering with the meter hides how much energy is actually used, which trumps this algorithm.



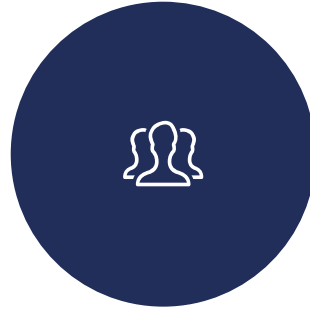
Our 2-Part Solution



1

FACILITATE REPORTING

Reporting energy theft in the UK is an annoying process with multiple different possible paths. Improving the process will make this process more accessible



2

RAISE AWARENESS

While 82% of the general population would be willing to report cases of electric meter tampering, just 25% have the prerequisite knowledge.

Who Are CrimeStoppers UK?

Meter Tampering Reports in The UK is Handled By a 3rd Party

The main way to report electric meter tampering in the UK is through a charity called CrimerStoppers UK. They allow people to report crime 100% anonymously, and then forward the reports to whichever official authority is responsible for it.

CrimerStoppers UK fills an already existing gap in crime, nearly 20% of the public have known about a crime but chose not to talk to the police.

"Your campaign Op Zygus was invaluable to us. Thank you very much indeed for your help. I have a family here that have received justice after seven years as a result."

CrimeStoppers UK have run awareness campaigns on meter tampering, but never hit the main points on how to identify a tampered meter. They also have a big gap in their reporting form. The form itself has multiple flaws that may act as blockers.

PROBLEMS WITH THE CRIMESTOPPERS FORM

- The form has 9 required questions, but some of the *required information* is not actually necessary.
- To submit the form, you need to enter responses to each question, even when you don't know the information.

The screenshot shows the CrimeStoppers UK reporting form for energy crime. The form is titled "Report details of energy crime" and "Additional Details". It contains several sections with questions and input fields:

- Report details of energy crime:**
 - 1. So that we can keep people safe, please provide the full address of where energy theft is taking place.
 - 1a. Please provide the first line of the address including house number/name and street name.
 - 1b. Please provide the town/city of the address and postcode if available.
 - 2. Is this a business or residential property?
 - Residential property
 - 3. Name of the suspected individual/s and/or company committing the theft.
 - Please give as much information as possible on the suspected individual/s and/or company committing the theft.
 - 4. Do you know whether the energy theft relates to gas, electricity or both?
 - Electricity
- Additional Details:**
 - 5. Do you know how the energy theft is being committed? Please give as much information as possible, e.g. any other comments that will support the investigation.
 - Please give as much detail as you can
 - 6. Please tell us how you heard about this service to help us know the best way to raise awareness of it.
 - Radio
 - 7. Can we keep in contact?
 - Yes, I'm happy to give you my name
 - No, I'd like to remain anonymous
 - 8. I confirm that this form is not being used to report something that needs the urgent attention of the emergency services.
 - I'm not a robot
 - REPORT

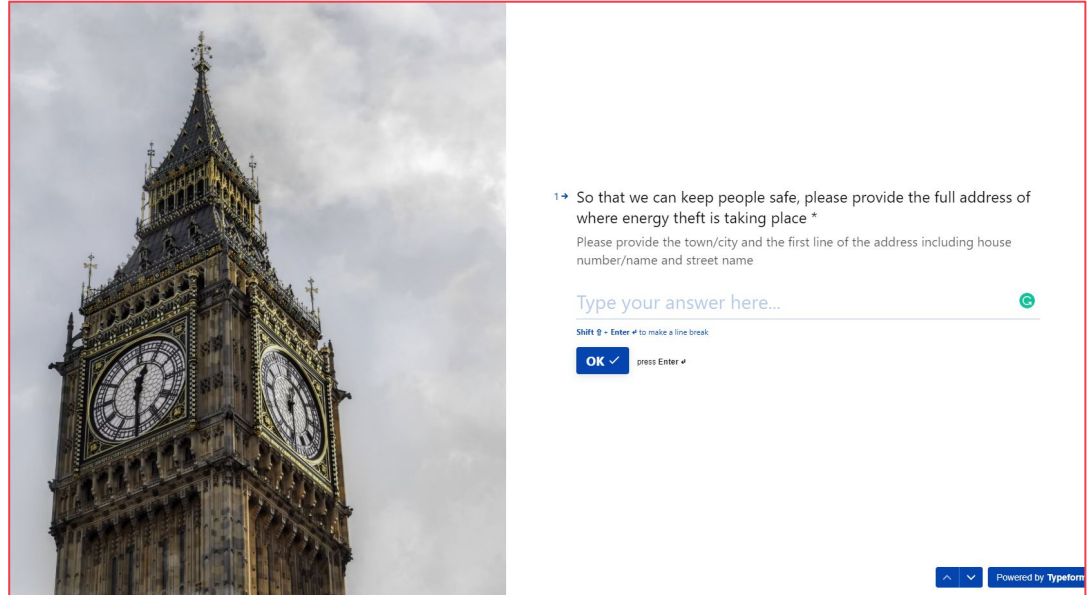
Increasing Reporting Accessibility

There are a few changes we recommend CrimeStoppers to implement into their reporting form to increase the general accessibility.

WHAT NEEDS TO BE CHANGED:

- Splitting up the form onto multiple pages will increase completion rate by up to 8%
- Combining similar questions and removing unnecessary questions.

You can try our functioning typeform mockup with [this](#) link.



1 → So that we can keep people safe, please provide the full address of where energy theft is taking place *

Please provide the town/city and the first line of the address including house number/name and street name

Type your answer here...

SHIFT ⌘ - Enter ↵ to make a line break

OK ✓ press Enter ↵

^ v Powered by Typeform

RUNNING AN AWARENESS CAMPAIGN



ENGAGING

Start with a story to capture people's attention, and quickly keep moving.



ACCESSIBLE

Make this campaign accessible by posting on multiple platforms.



EDUCATIONAL

Outline the specific details of what a tampered meter looks like.



HELPFUL

Make sure the information given can be applied in the identification or reporting process.



INVOKING ACTION

Have multiple calls to action depending on the platform used.

CrimeStoppers UK Have Already Run a Similar Campaign

CrimeStoppers UK ran an awareness campaign named Tick Tock to raise awareness about the dangers of electric meter tampering. They used videos and posters to communicate the dangers of meter tampering with the public audience.

OBJECTIVES CRIMESTOPPERS WERE AIMING TO ACHIEVE

- To deter people from meddling with meters – this is not just illegal, but highly dangerous.
- To share ideas that can help you save money on bills without putting yourself, your family, your business or your community at risk.
- To give anyone that is concerned, the opportunity to report any suspicions of energy theft/meter tampering anonymously here or by phone at 0800 023 2777.



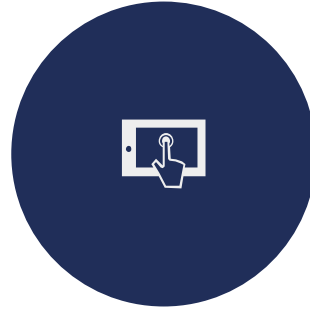
Immediate Next Steps



CONTACT CRIMESTOPPERS

First Step To A Partnership

You can get in touch with CrimeStoppers for a partnership using [this](#) form!



DESIGN AWARENESS CAMPAIGN

First Step To Publishing The Campaign

Need to decide what platform you'll be using for the awareness campaign.

Who to Talk to

Shell Should Talk to These People



LORD ASHCROFT

FOUNDER OF CRIMESTOPPERS

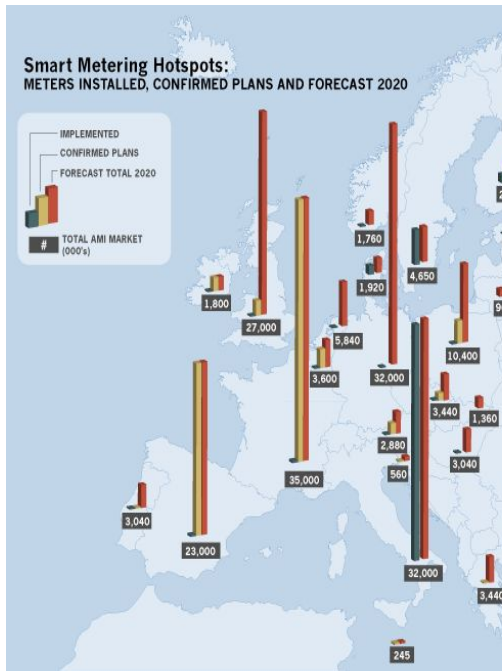
Lord Ashcroft originally founded CrimeStoppers as a way to enable citizens in the UK to anonymously report crime.



MARK HALLAS OBE

CHIEF EXECUTIVE OF CRIMESTOPPERS

Mark Hallas OBE is the CrimeStoppers Chief Executive and is focused on the effectiveness of the organization.



NEXT ACQUISITIONS

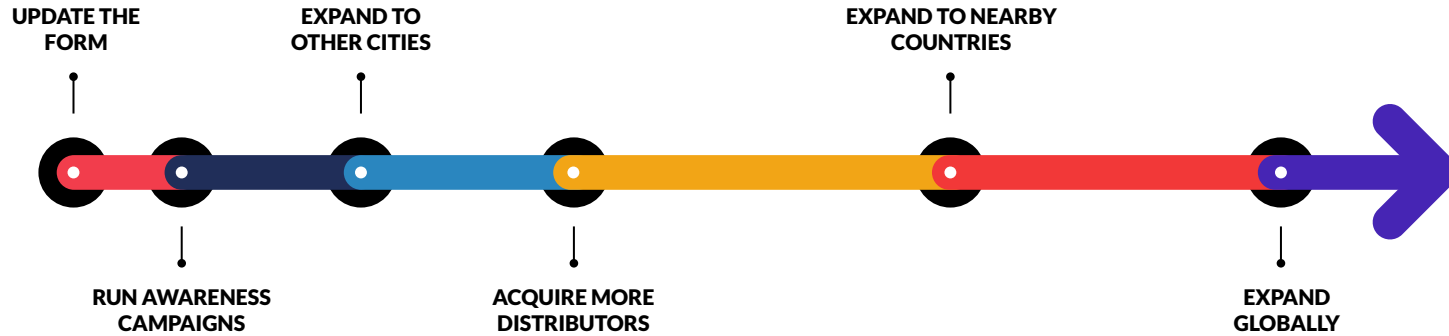
DISTRIBUTORS IN ITALY

Italy currently has the highest deployment rate for smart meters globally. This makes Italy a perfect place to acquire more consumers to directly distribute electricity to. The chances of meter tampering are much lower because of the higher smart meter rates compared to old meters. The reason Italy is much further ahead compared to any other country in smart meter rollout is due to the fact smart meters were made necessary in 2006.

Tirreno Power holds 1.8% of the energy market in Italy. They generate and distribute green energy on top of oil and gas.

Acquiring Tirreno Power would give Shell a step through the door in the Italy energy market.

Short Term Timeline



After the completion of the [pilot project](#) in London Shell should expand to other nearby cities in the UK. We are assuming that Shell directly distributes to a few other cities than London in the UK, those cities is where Shell should go next.

After expanding to nearby cities, Shell should [acquire more distributors](#) in other countries to continue expanding the amount of consumers they are directly distributing to.



Robert MacWha



Nicolas Gatien



THANK YOU SHELL!

We're so inspired by the steps Shell is taking to lead the industry to net-zero emissions by 2050. We are super grateful for the opportunity to tackle different problems in the industry. We both learned an insane amount in the past month coming up with a recommendation. We hope it ends up being useful!