VAT and cross-border EV charging

what every CPO and eMSP needs to know

optimile

VAT,

one of the most overlooked risks in EV charging

Electric vehicle charging is **scaling fast** across Europe and beyond. But while technology, roaming and user experience often get most of the attention, VAT treatment of charging sessions remains one of the **most complex (and risky) areas** for Charge Point Operators (CPOs) and eMobility Service Providers (eMSPs).

So, how are EV charging sessions treated for VAT purposes? And what does that mean for your **invoicing, compliance** and **cross-border operations**? This eBook breaks it down in practical terms, including a clear decision tree on page 10 & 11 to help you determine the correct VAT treatment in different scenarios.

01 The growing VAT complexity

behind EV charging

As EV charging networks expand across borders, VAT treatment becomes increasingly complex for CPOs and eMSPs. Charging transactions often involve **multiple parties** — from infrastructure operators to mobility providers and end customers — operating across **different countries and regulatory frameworks**. Each charging session may trigger different VAT obligations depending on the role of each party, the location of the charging station, and whether electricity is supplied to a business or an end consumer.

What makes this particularly challenging is that electricity is treated as a **good**, not a service, under VAT law. This means that specific rules apply regarding the place of supply, reverse-charge mechanisms, and local VAT rates. When charging sessions occur across borders, for example, when a driver charges in another country through a roaming platform, **determining the correct VAT treatment** quickly becomes more complicated.

As a result, operators must carefully structure their invoicing and VAT processes to ensure compliance across multiple jurisdictions. Without a clear understanding of these rules, international expansion can introduce significant administrative complexity and tax risk.

02 Why this matters for your business

Getting VAT treatment wrong in EV charging can lead to significant **operational and financial consequences**. As charging networks expand across borders, operators increasingly need to deal with **different VAT rules, registrations and invoicing requirements** in multiple countries.

IF NOT HANDLED CORRECTLY, THIS CAN RESULT IN:

- incorrect invoicing
- unnecessary VAT registrations
- missed VAT recovery opportunities
- compliance risks during audits
- rejected invoices from customers who require correct VAT treatment

In practice, larger organizations and public-sector customers often refuse to pay invoices if the VAT treatment is not compliant with local regulations.

GETTING IT RIGHT HELPS YOU:

- automate invoicing with confidence
- scale cross-border operations safely
- reduce tax risk
- ensure customers receive compliant invoices
- and focus on growth instead of administration

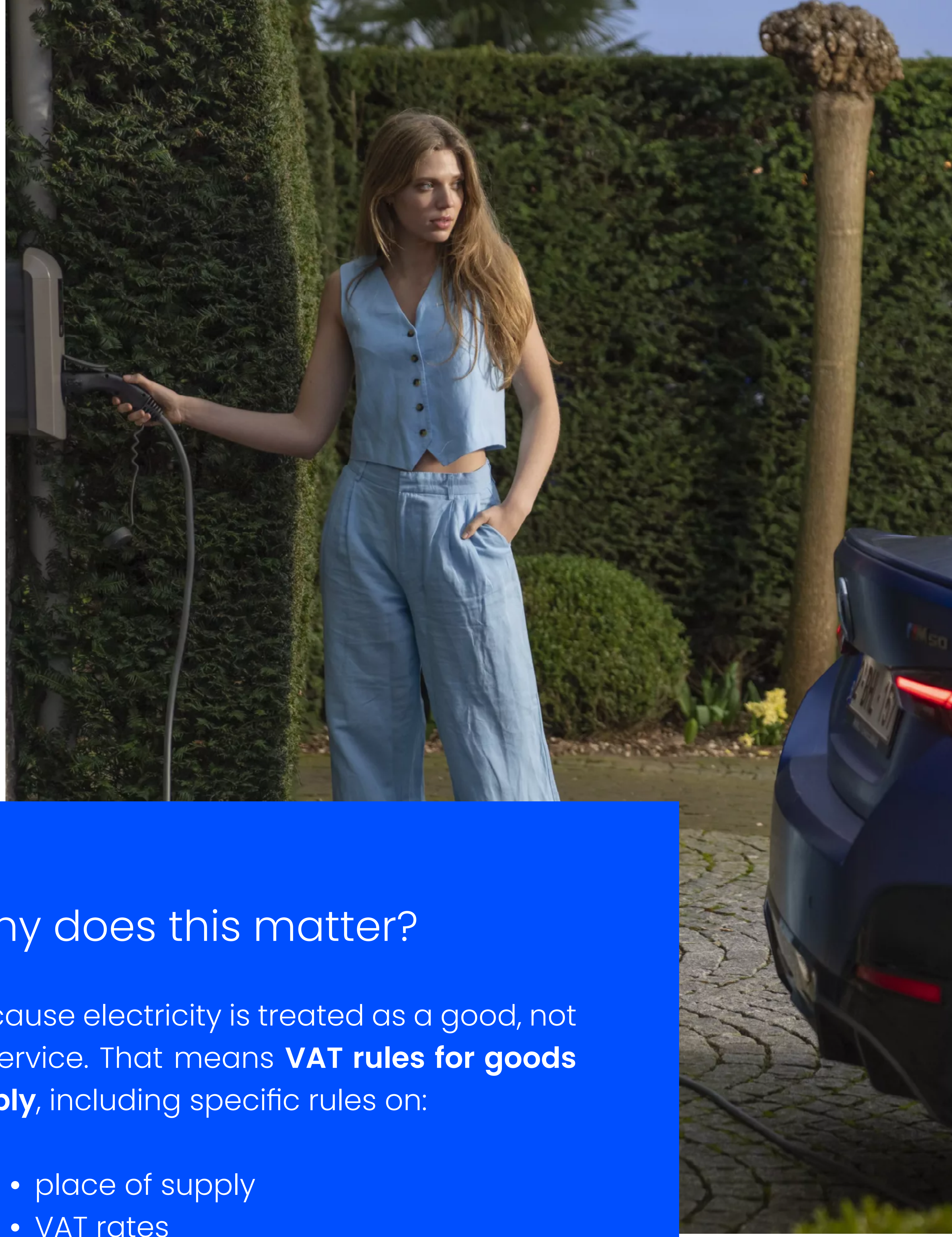
03 One charging session = **one supply of electricity**

From a VAT perspective, an EV charging session is considered as **one single composite supply: the supply of electricity**.

Even though a charging session may include:
- access to charging hardware
- software platforms and apps
- technical support
- reservation or payment functionality

for VAT purposes, these elements are not assessed separately. They are all considered ancillary to the main transaction: **electricity delivered to the vehicle battery.**

Note: different VAT rules apply to subscription-based services
This guide focuses on the VAT treatment of electricity supplied during charging sessions. Other revenue streams, such as subscriptions or access fees, are considered services and follow different VAT rules, typically linked to the customer's location.



Why does this matter?

Because electricity is treated as a good, not a service. That means **VAT rules for goods apply**, including specific rules on:

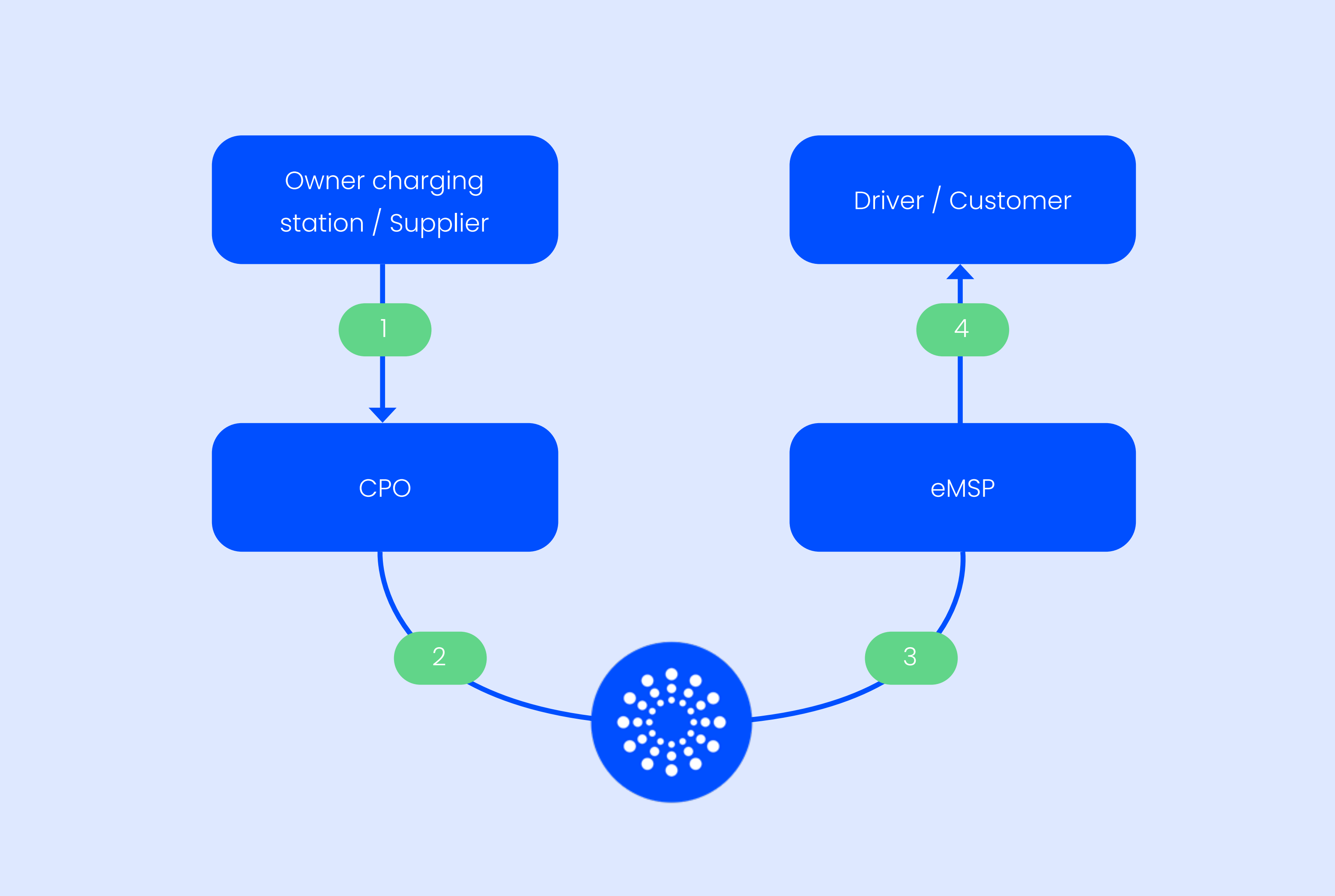
- place of supply
- VAT rates
- and reverse-charge mechanisms (invoicing without VAT)

04 How VAT flows through **the EV charging ecosystem**

In a typical EV charging transaction, electricity flows through multiple actors in the ecosystem. Electricity is supplied by the Charging Station Supplier, enabled on software of the **CPO** and made accessible to drivers through an **eMSP**. A roaming platform can connect these parties, enabling charging across different networks.

From a VAT perspective, two types of transactions exist:

- **Sales between CPOs and eMSPs (acting as resellers)** > VAT is typically linked to the country where the reseller is established, often using the reverse-charge mechanism.
- **Sales to the end customer** > VAT is determined by the country where the electricity is physically consumed.



1, 2, 3: Sale to reseller:
Place of taxation = country of establishment reseller

4: Sale to consumer:
Place of taxation = country of consumption > if customer has VAT in other country: reverse charge, if not, locat VAT shouls apply.

05 Your role in the chain determines **the VAT treatment**

To determine the correct VAT treatment, you first need to understand your role in the charging chain.

Reseller of electricity (typical for eMSPs and many CPOs)

If you resell electricity and your own consumption is negligible, you are considered a taxable dealer.

PLACE OF SUPPLY

- VAT treatment is linked to where you are established or have a fixed establishment.

PRACTICAL IMPACT

- Cross-border B2B transactions often fall under the **reverse-charge mechanism**
- No local VAT needs to be charged in these cases
- This may trigger VAT registration obligations in other countries, depending on the specific transaction setup (see decision framework on page 10 & 11)

Electricity supplied to the final consumer

When electricity is consumed by the end user (e.g. EV driver) and not resold, the end customer is considered the final consumer.

PLACE OF SUPPLY

- VAT is linked to the country where the electricity is physically consumed (location of the charging station).

PRACTICAL IMPACT

- **Local VAT applies** in the country of consumption
- Reverse charge does **not apply in typical B2C situations**
- Reverse charge may apply if the customer is VAT-registered in the country of consumption.
- Operators may need a **local VAT registration** to invoice correctly

06 EU vs. Non-EU charging: a crucial distinction

CHARGING SESSIONS WITHIN THE EU

Within the EU, VAT treatment depends on:
- whether the customer has a **valid VAT number** in the country of consumption,
- and whether the reverse-charge mechanism applies.

Depending on those factors:
- VAT may be charged locally
- VAT may be reverse-charged
- a VAT registration may be required

CHARGING SESSIONS OUTSIDE THE EU

Charging transactions that take place **outside the EU VAT territory fall outside the scope of EU VAT** altogether.

However, that does **not** mean there is no tax impact:
- local VAT or GST rules of the non-EU country may apply,
- and those rules can differ significantly from EU principles.

Looking ahead: VAT in the Digital Age (ViDA)

The European Union is currently introducing **VAT in the Digital Age (ViDA)**, a set of reforms aimed at simplifying VAT reporting and cross-border transactions.
One of the proposed changes is a **Single EU VAT Registration**, which could allow businesses to operate across multiple EU countries without needing separate VAT registrations in each country.

While these reforms are still being rolled out and may take time to fully apply, they could significantly simplify cross-border VAT compliance for EV charging operators in the future.

07 Understanding the **reverse charge mechanism**

The reverse charge mechanism shifts the responsibility for VAT from the supplier to the customer. Instead of charging VAT on the invoice, the supplier invoices **without VAT**, and the customer accounts for the VAT in their own country. The total VAT due does not change, only **who reports and pays it**.

HOW IT WORKS IN PRACTICE

- The operator issuing the invoice (CPO or eMSP) does not charge VAT.
- The customer reports the VAT as both **output and input tax**
- For most businesses, this results in a **neutral transaction** (no net VAT paid)

WHEN DOES IT APPLY?

The reverse charge mechanism typically applies to B2B transactions between VAT-registered companies in different countries. It does not apply to private individuals.

WHAT MUST BE ON THE INVOICE?

To remain compliant, make sure your invoice includes:

- No VAT charged
- A clear mention of **"reverse charge"**
- Both VAT numbers (supplier and customer)
- These requirements are automatically supported within the Optimile platform."

IMPORTANT NOTE

Always verify your customer's VAT number (e.g. via VIES) before applying reverse charge.

08 A step-by-step guide

for determining the correct VAT treatment

Start by identifying the nature of the transaction.

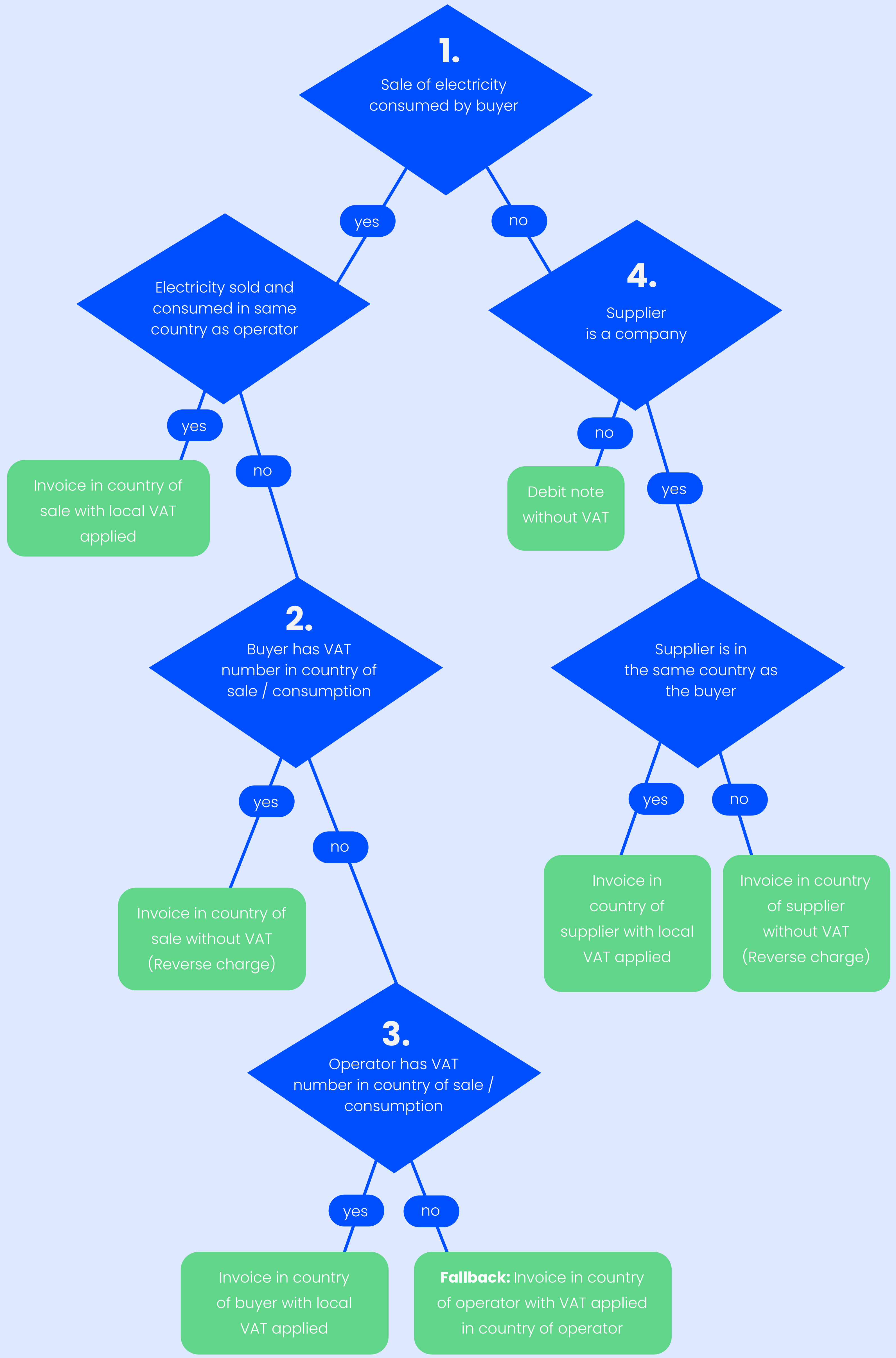
1. IS THIS A SALE OF ELECTRICITY CONSUMED BY THE BUYER?

If yes, the VAT treatment depends first on where the electricity is consumed.

- If the electricity is **sold and consumed in the same country as the operator**, the rule is straight-forward > invoice in the operator's country with local VAT applied
- If the electricity is **consumed in another country**, additional checks are required.

2. DOES THE BUYER HAVE A VAT NUMBER IN THE COUNTRY OF CONSUMPTION?

- If the buyer has a valid VAT number in that country> invoice **without VAT under the reverse-charge mechanism**
- If the buyer does not have a VAT number there > the operator's VAT position becomes relevant



3. IS THE OPERATOR VAT-REGISTERED IN THE COUNTRY OF CONSUMPTION?

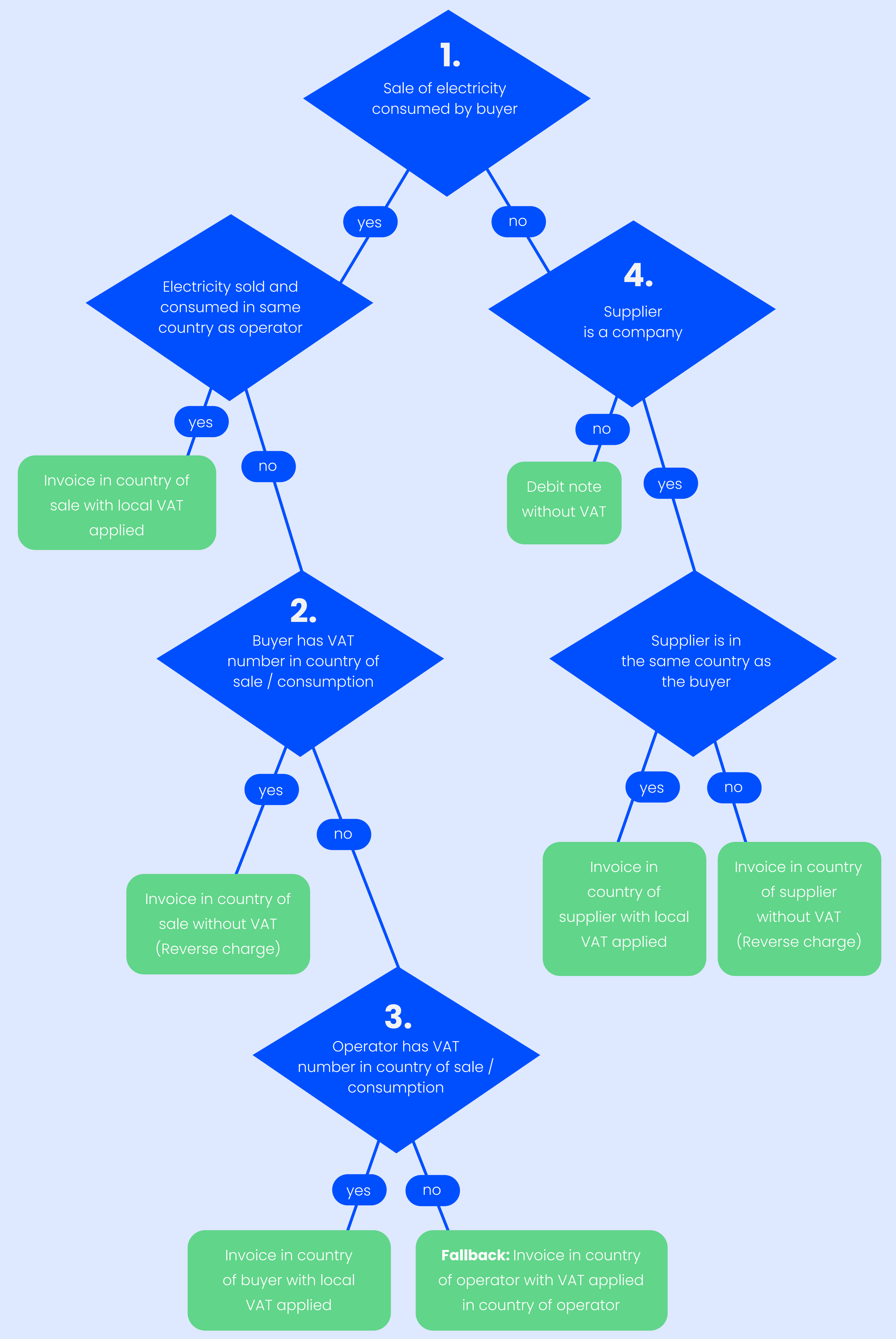
- If yes > invoice in the country of consumption with **local VAT applied**
  Example: An employee on holiday in Italy starts a charging session. Since Mobiflow has an Italian VAT number, the session is invoiced from Italy with Italian VAT applied.
- If no:
  - invoice from the operator's country with VAT applied there
  - this is typically a **temporary fallback**, as a local VAT registration is usually required
    Example: An employee on holiday in Slovakia starts a charging session. Since Mobiflow has no Slovak VAT number, the session is first invoiced from Belgium with Belgian VAT. It will later need to be credited and re-invoiced with Slovak VAT.

FOR AN OVERVIEW OF LOCAL VAT RULES PER COUNTRY, SEE:
VAT rules and rates: standard, special & reduced rates - Your Europe

4. TRANSACTIONS WHERE ELECTRICITY IS NOT CONSUMED BY THE BUYER

If the transaction does **not concern the sale of electricity consumed by the buyer** (for example, settlements with charging station owners):

- If the supplier is **not a company** > issue a debit note without VAT
  Example: A private individual earns revenue from a public charger. No VAT applies. Optimile issues a self-billed debit note on their behalf.
- If the supplier is a company:
  - If both parties are in the **same country** > invoice with **local VAT applied**
    Example: A Belgian company owns charging devices operated on the Mobiflow platform.
  - If parties are in **different countries** > invoice **without VAT under reverse charge**
    Example: A Luxembourg-based company owns charging devices operated on the Mobiflow platform.



09 VAT in practice
3 EV charging scenarios

Optimile's approach to cross-border VAT is grounded in real operational experience. Through our own charging platform, **Mobiflow**, we operate across multiple European countries and maintain local VAT registrations where required to ensure compliant invoicing. This hands-on experience allows us to design platforms and processes that help CPOs and eMSPs manage **cross-border VAT** with greater clarity and confidence. The following **three scenarios** illustrate how VAT rules apply in real charging situations.

1. Belgian eMSP, charging session in the Netherlands

THE SCENARIO

Jan, a Belgian employee of ABC nv (a Mobiflow customer), charges his EV in the Netherlands at a station. Mobiflow invoices ABC nv for the session. Because the electricity is consumed in the Netherlands and ABC nv has no Dutch VAT number, **Dutch VAT applies**, requiring the operator, Mobiflow, to hold a **local VAT registration in the Netherlands**.

THE TAKEAWAY

When electricity is consumed in another country, local VAT usually applies.

2. French customer charging in France

THE SCENARIO

Jean, a French employee of ABC SA (a Mobiflow customer), charges his EV. Mobiflow invoices ABC SA for the charging session. Since the customer is **VAT-registered in France**, the invoice is issued **under the reverse-charge mechanism**, meaning ABC SA accounts for the VAT locally, and the VAT on the invoice is 0%.

THE TAKEAWAY

When both parties have a valid VAT number, the reverse-charge mechanism applies.

3. Foreign charging station owner on a Belgian CPO network

THE SCENARIO

A Luxembourg-based company owns public charging stations operated via the **Mobiflow network**. The relationship between the station owner and the CPO is treated as a **resale of electricity**, meaning the VAT treatment depends on where both parties are established, rather than on the driver's origin or the station's physical location.

Mobiflow issues a **self-billing invoice** on behalf of the owner to facilitate the monthly payout. As Mobiflow is established in Belgium and the owner is not, the transaction qualifies as a **cross-border supply**, and Belgian VAT is **reverse charged**.

This automated setup ensures compliant invoicing for the foreign owner, without requiring additional administrative steps or local VAT registration.

THE TAKEAWAY

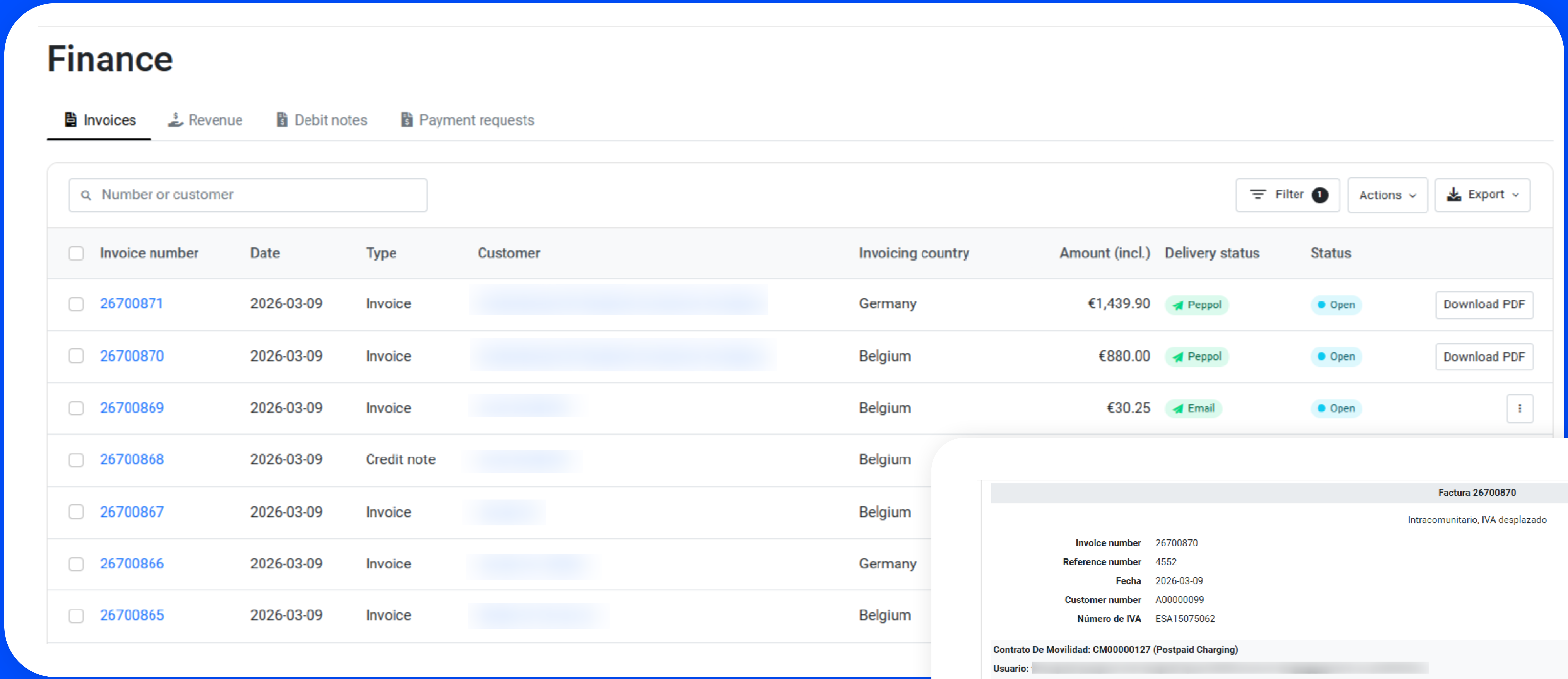
In B2B cross-border transactions, the location of the consumer is irrelevant.

10 How Optimile **simplifies cross-border VAT**

Operating across borders often requires **VAT registrations in multiple countries**, depending on where charging sessions take place and how electricity is invoiced to customers. While the responsibility for VAT registration and reporting remains with the operator, Optimile supports this process by enabling invoicing from different VAT entities and by structuring charging data per country.

This helps operators manage cross-border VAT obligations more efficiently once the required registrations are in place. For operators, this also means more clarity, fewer surprises, and compliance that grows with your business.

The **Optimile platform** automatically generates country-specific invoices, clearly separates charging sessions per country, and supports structured exports for monthly VAT reporting. This reduces manual work, errors, and compliance risk.



Finance

Invoices | Revenue | Debit notes | Payment requests

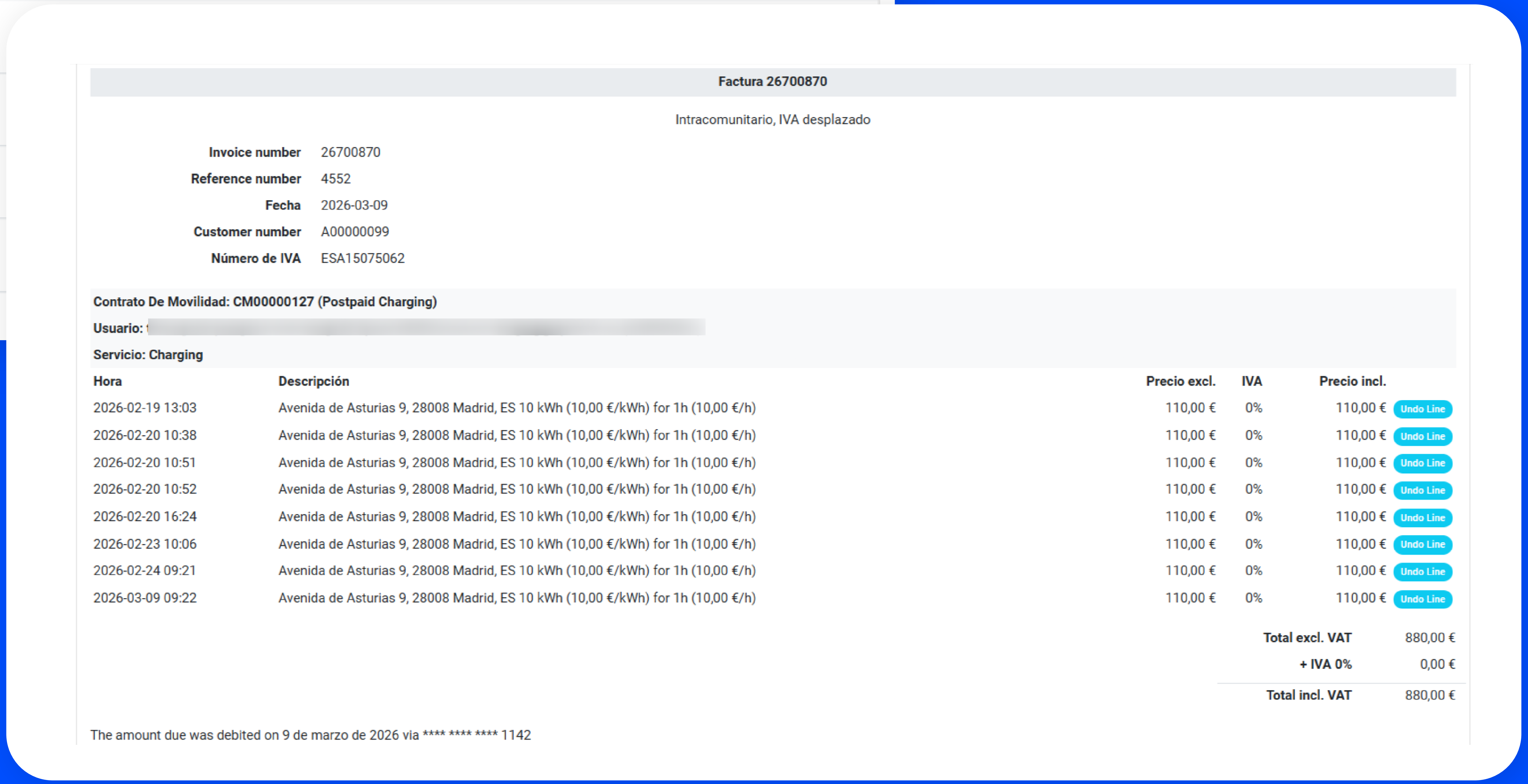
Number or customer

Filter 1 | Actions | Export

	Invoice number	Date	Type	Customer	Invoicing country	Amount (incl.)	Delivery status	Status	
	26700871	2026-03-09	Invoice		Germany	€1,439.90	Peppol	Open	Download PDF
	26700870	2026-03-09	Invoice		Belgium	€880.00	Peppol	Open	Download PDF
	26700869	2026-03-09	Invoice		Belgium	€30.25	Email	Open	
	26700868	2026-03-09	Credit note		Belgium				
	26700867	2026-03-09	Invoice		Belgium				
	26700866	2026-03-09	Invoice		Germany				
	26700865	2026-03-09	Invoice		Belgium				

Overview of all invoices, including the country where VAT is invoiced from.

Invoice with reverse charge VAT (0%).



Factura 26700870

Intracomunitario, IVA desplazado

Invoice number	26700870
Reference number	4552
Fecha	2026-03-09
Customer number	A00000099
Número de IVA	ESA15075062

Contrato De Movilidad: CM00000127 (Postpaid Charging)

Usuario:

Servicio: Charging

Hora	Descripción	Precio excl.	IVA	Precio incl.	
2026-02-19 13:03	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-20 10:38	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-20 10:51	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-20 10:52	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-20 16:24	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-23 10:06	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-02-24 09:21	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line
2026-03-09 09:22	Avenida de Asturias 9, 28008 Madrid, ES 10 kWh (10,00 €/kWh) for 1h (10,00 €/h)	110,00 €	0%	110,00 €	Undo Line

Total excl. VAT	880,00 €
+ IVA 0%	0,00 €
Total incl. VAT	880,00 €

The amount due was debited on 9 de marzo de 2026 via **** **** **** 1142

Optimile doesn't replace your finance team or tax advisor, but it **removes complexity, manual work and uncertainty** from international VAT handling, so your business can scale with confidence.

11 Scale your EV charging business with confidence

EV charging may be complex, but VAT doesn't have to be. With the right understanding and the right platform, CPOs and eMSPs can stay compliant while scaling across borders with confidence.

As EV charging networks expand internationally, managing VAT correctly becomes a critical operational capability. By combining a clear understanding of VAT rules with the right technological support, operators can reduce risk, simplify invoicing, and focus on growing their charging network.

WANT TO SIMPLIFY CROSS-BORDER VAT HANDLING FOR YOUR EV CHARGING BUSINESS?

Discover how the Optimile platform helps CPOs and eMSPs automate invoicing, manage multiple VAT entities, and stay compliant across borders.

› **Learn more about** Optimile
› **Talk to our team:** sales@optimile.eu

Notes and disclaimer
VAT in the EV charging ecosystem is a complex topic that covers many different scenarios and interpretations, depending on business models, roles in the value chain, and local regulations.

This guide focuses specifically on the VAT treatment of EV charging sessions and cross-border charging within the European ecosystem. It is intended to help CPOs and eMSPs better understand the key principles and operational implications.

The content is provided for informational purposes only. Optimile does not provide tax advice and is not a tax consultancy. For specific VAT obligations or compliance requirements, companies should consult a qualified tax advisor.

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