

Value added tax on cross border transactions in network energy

Energy Community

5th Workshop

25 May 2023

Electricity and VAT

- Electricity **cannot be stored** economically (yet) - electricity has a different value over time.
- **flows cannot be controlled easily and efficiently**, and transmission components must be operated under safe flow limits - electricity has a different value over space.
- The **ability to change the generation/consumption of electricity** at short notice is not easy and fast

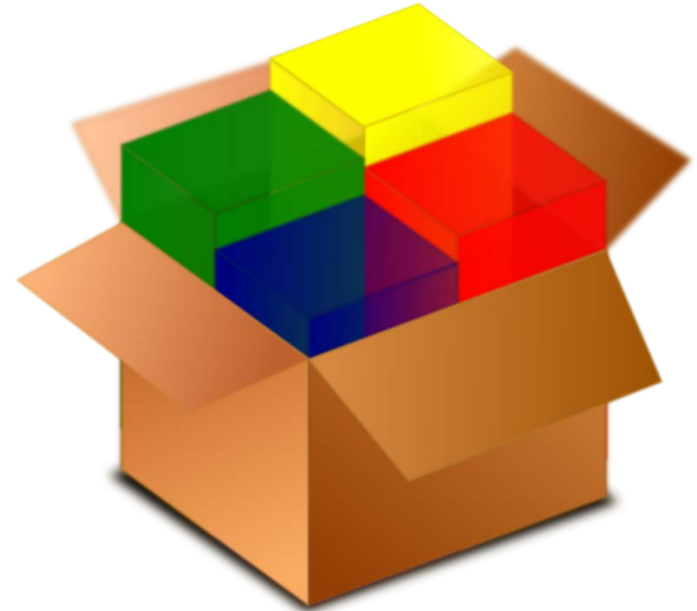
Electricity is **goods** for VAT purposes

- Certain special rules:

- **Place of taxation**

- **Exemptions**

- **Person liable**



Special PoS rules

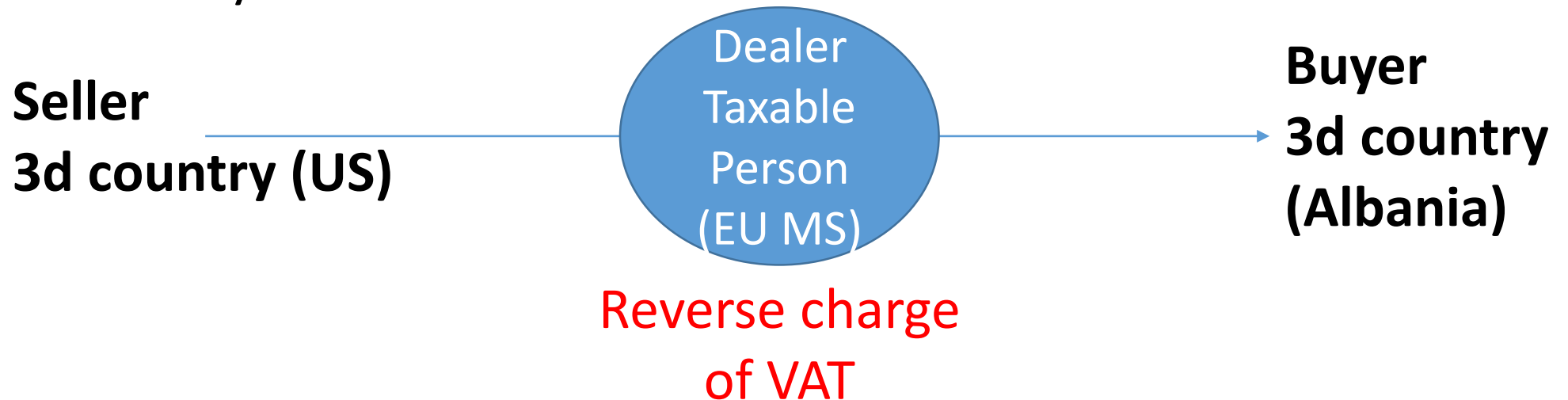
- Supply of gas through distribution system / electricity **before** the final stage of consumption – at the place of the customer
- Supply of gas/electricity **at the final stage** – at the place where the customer consumes the goods
- Supply of gas through distribution system/electricity to a **taxable dealer** – place of business/PE of the “dealer” (EU definition)
- Provision of **access** to and transport/transmission through natural gas and electricity distribution systems and related services
- provision of access to a **non-taxable customer** at his establishment when outside EU, at the customer’s place of business otherwise

Exemption

- the importation/ exportation of gas through natural gas distribution system, or of electricity

gas transported in gas tankers (“rich gas”/“wet gas”)

gas or electricity from a 3d country bought by a taxable dealer established in the EU for resale to a final consumer in another 3d country:



Person liable (reverse charge)

- Main characteristics: cross-border and domestic
- Challenges: place of business/PE/VAT registration

MS 1

To whom is the supply made ?
Which technical and human resources
are used for the reception of the
supply?
Who bear the profits and risks?

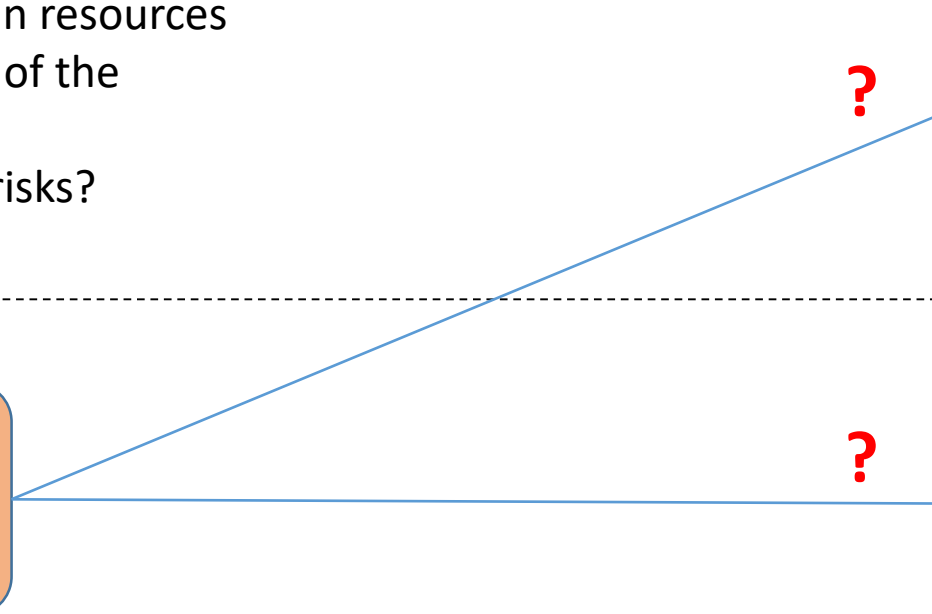


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MS 2



General VAT rules

Main scheme

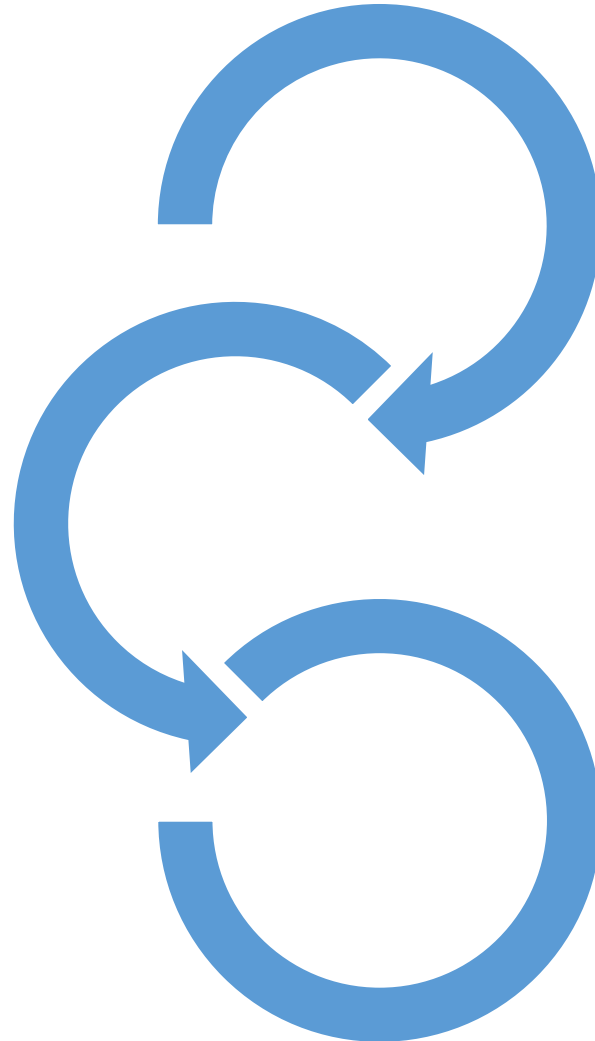
General VAT scheme

1. Is the supply in the scope of VAT?

2. Where is the place of supply (tax jurisdiction)?

3. Is it taxable or exempt?
If taxable, what is the taxable basis and rate?

4. Who is the person liable to pay VAT?



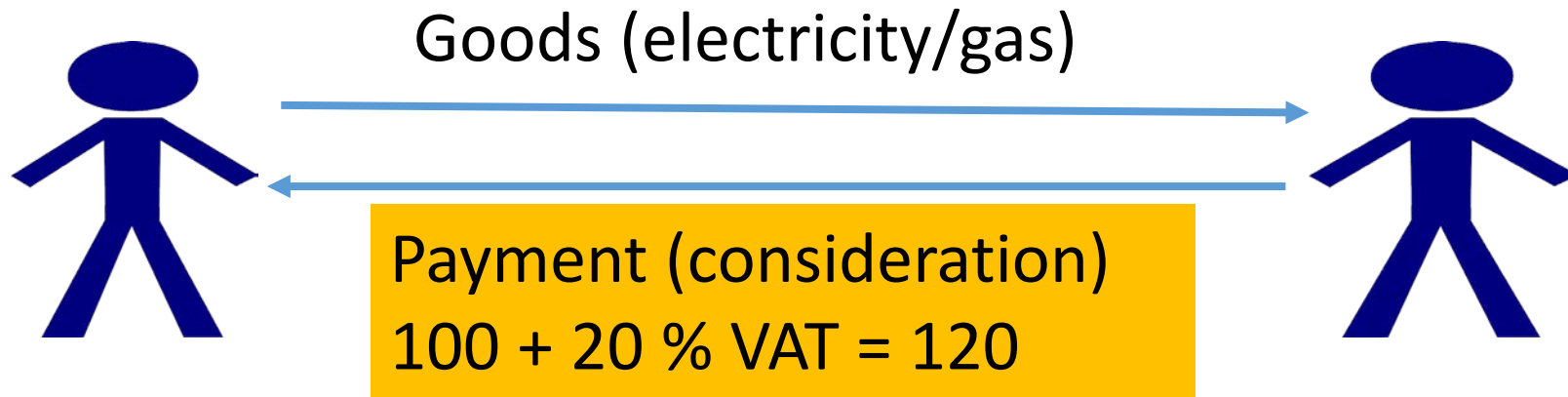
Is the supply within the scope of VAT?

- „A taxable supply“ is a supply of goods or services against consideration carried out by a taxable person acting as such.
- „Supply of goods“ is the transfer of the right to dispose of tangible property as owner.
- „Taxable person“ shall mean any person who, independently, carries out in any place any economic activity, whatever the purpose or results of that activity. Any activity of producers, traders or persons supplying services shall be regarded as ‘economic activity’.
- As such - in a business capacity

Person liable – the supplier, except when **domestic reverse charge**

Taxable supply

MS 1



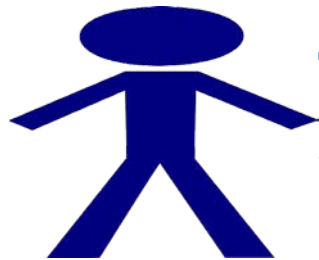
Taxable amount: taxes (excise), duties, levies, charges, incidental expenses

MS 1

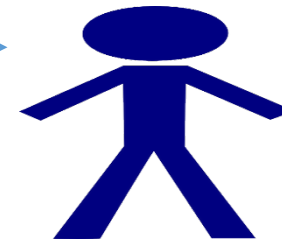
Taxable supply

MS 2

Reverse charge of
VAT



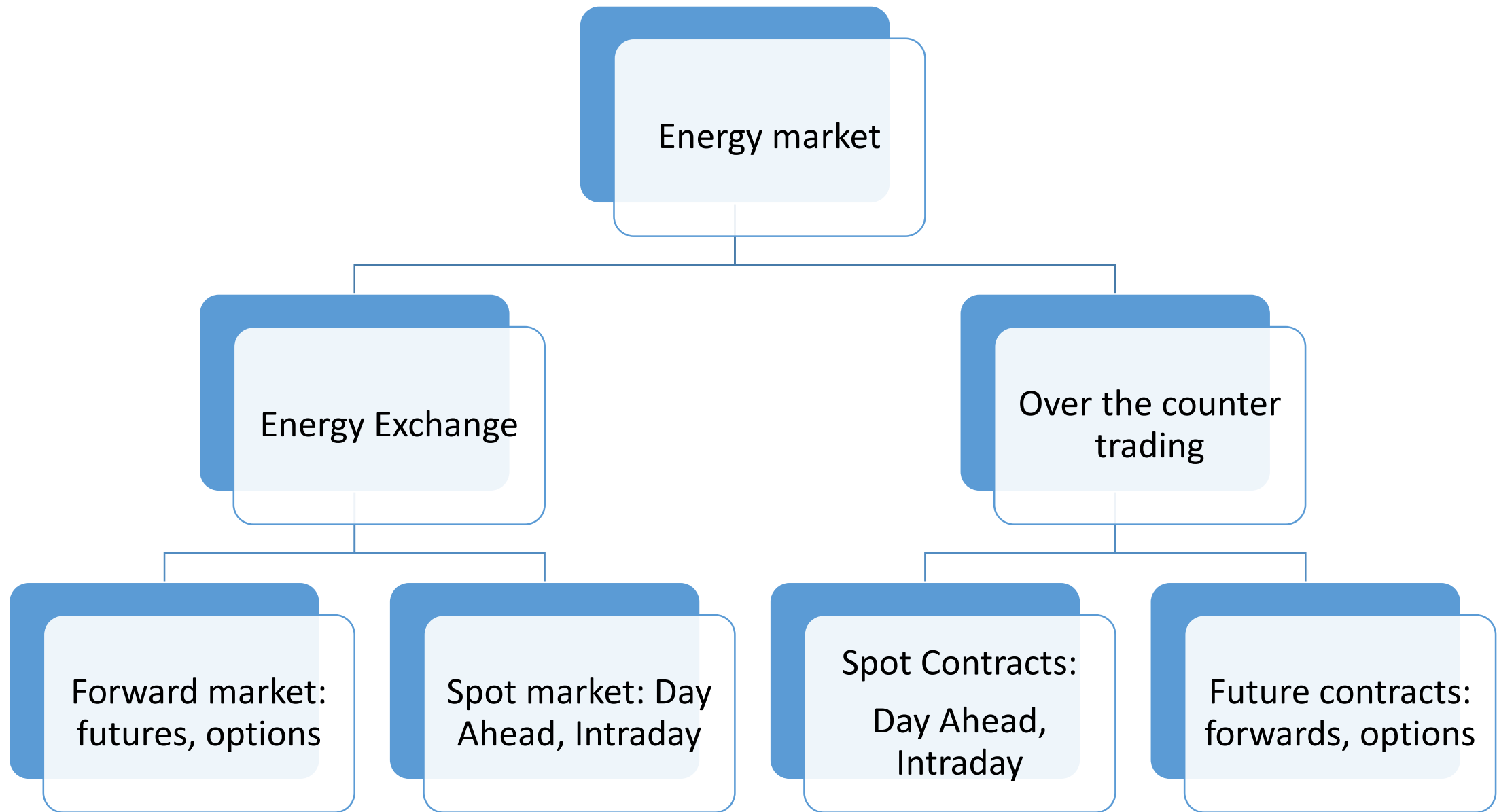
Goods (electricity/gas)



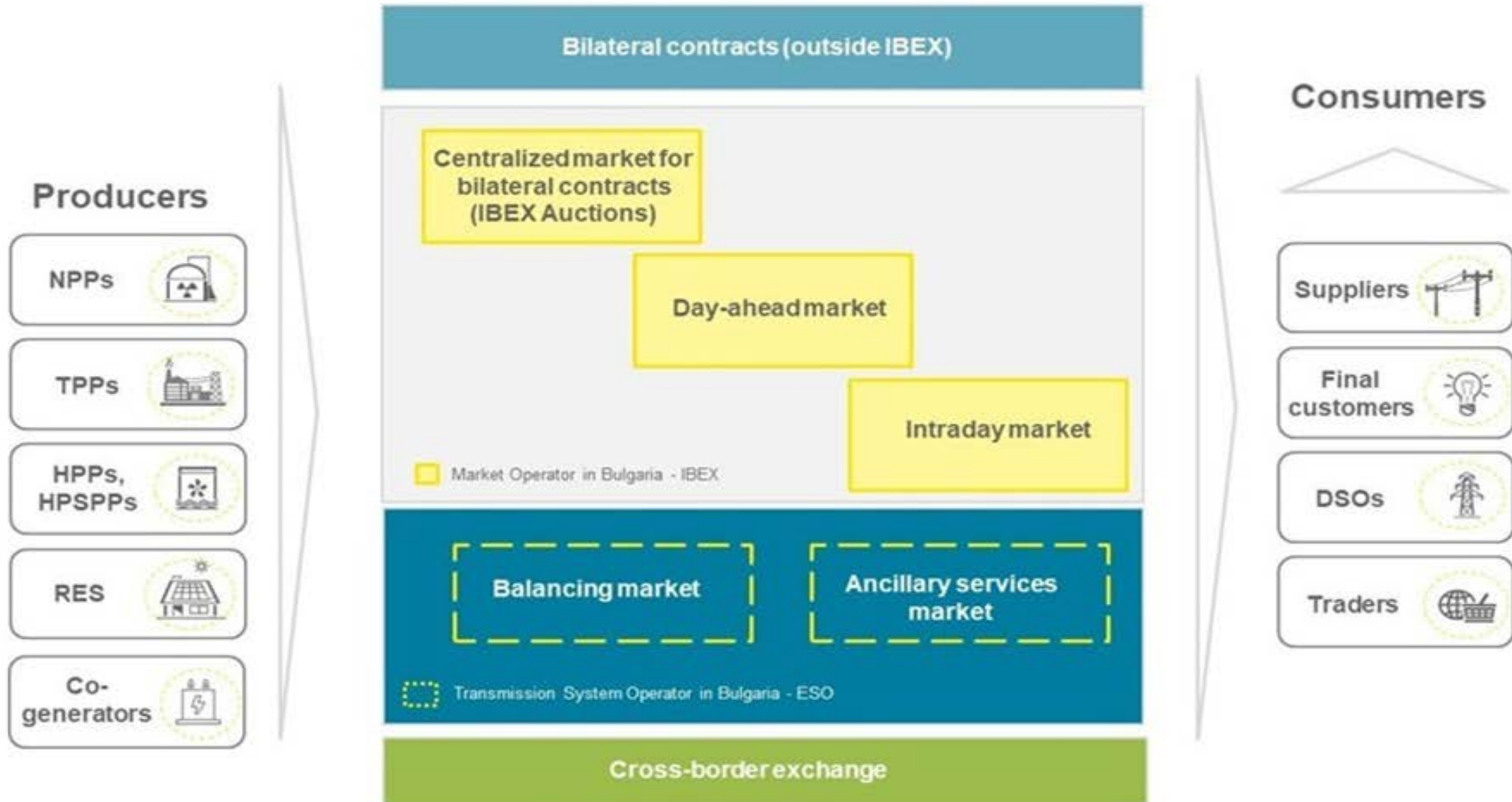
Payment (consideration)
 $100 + 20\% \text{ VAT} = 120$

Relevant EU VAT Law provisions

- **Chargeable event and chargeability:** successive payments, continuous supplies
- **Taxable amount:** components, ancillary supplies, bundled and complex supplies
- **Rate:** reduced rates (end-consumers)
- **Persons liable:** intermediary (disclosed/undisclosed agent)
- **Exemptions:** certain financial transactions and exportations
- Reporting obligations



Electricity market



Bilateral trade

Wholesale

Bilateral trade - wholesale

- Direct, over-the-counter trade, without intermediaries or clearing houses.
- Trading partners are in direct contact with each other or make use of a broker.
- The transactions occur on trading platforms online or through brokerage companies.



Bilateral trade

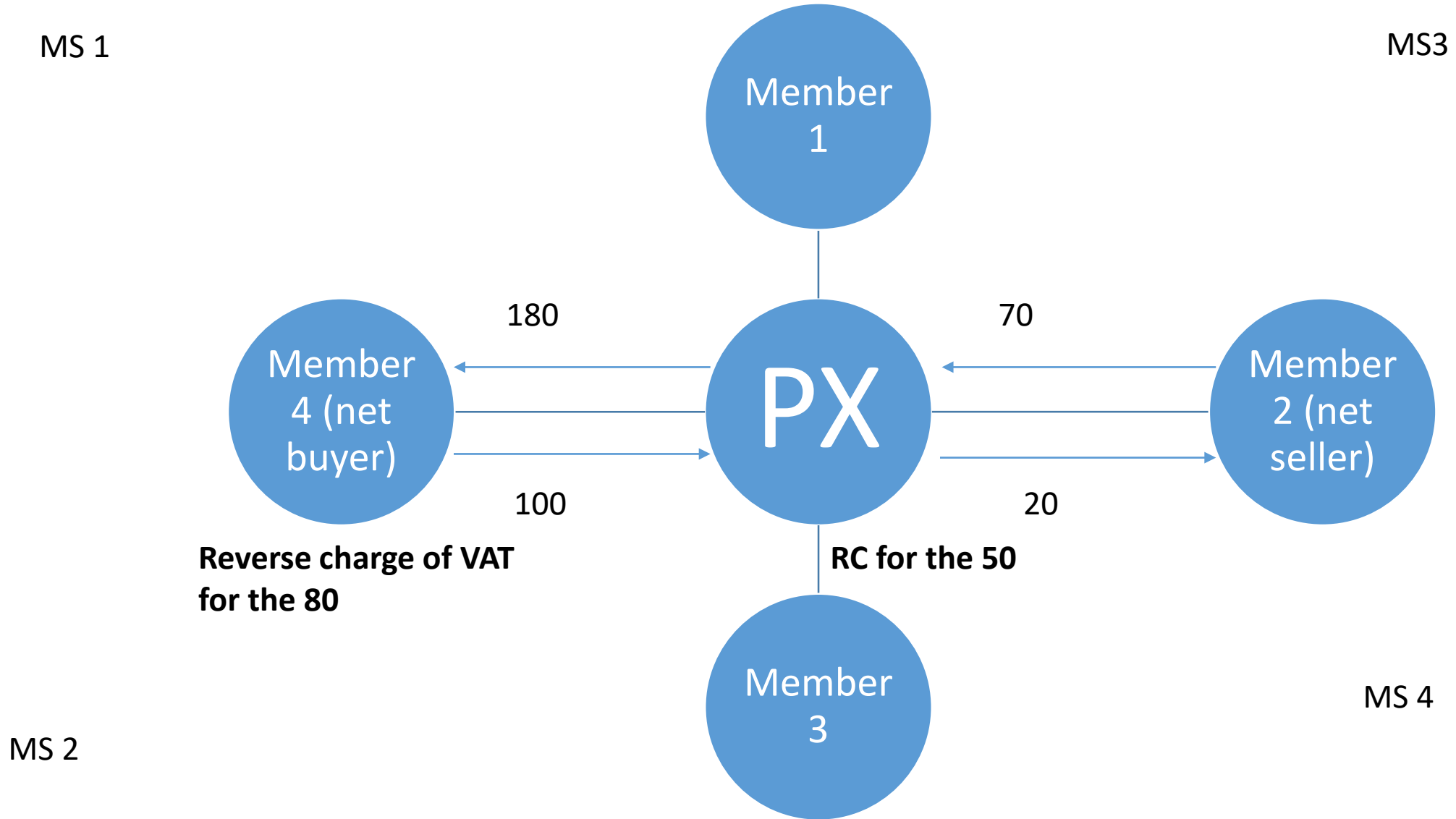
- Taxable amount:
 - taxes, duties, levies and charges
 - incidental expenses
- Reduced or standard rate / exemption?
- Ancillary supply: e.g. the handling of the “compulsory quota” of electricity certificates

POWER EXCHANGE




- Participants on the PX trade anonymously. PX operates in a similar way to regular stock exchanges.
- Renewable power producers are usually too small to directly trade their produced power on energy markets – trades usually conducted via an aggregator (e.g. virtual power plant or a utility company)

POWER EXCHANGE



Retail: balancing energy

- Impossibility to store. Electricity consumption = production
- Need of accurate forecast  every consumer and producer shall be part of a balancing group with a Balance Responsible Party to ensure system's stability

Retail: balancing energy

- When a system operator procures balancing energy - the underlying transaction is a B2B supply of goods;
- Assumption that each TSO is a taxable person (because it will not consume the balancing energy, but re-sell it at the same price to all unbalanced responsible parties.)
- The place of supply shall be deemed to be the place where that taxable dealer has established his business.

Future reform – the VAT in the Digital Age

- Extension of One Stop Shop platform (OSS) – one portal for all VAT reporting and payment obligations
- Inclusion in the OSS of supplies of gas, electricity, heat or cooling energy (PoS Art 39 of the EU VAT Directive)
- How - by broadening the definition of the MS of consumption to include these supplies
- 1/1/2025

Retail: prosumers



Retail: prosumers

- Status of the owner of the PV – taxable or non-taxable person
- Deduction right - full/partial/choice/none

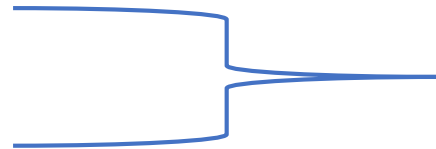
Netting schemes

- Solar PV panels (other DG types) of consumers – own consumption and remuneration for the non-consumed electricity fed to the grid
- Standard commercial arrangements:

➤ Standard supply arrangement – separate invoices

➤ Net metering

➤ Net billing



*The netting is highly advantageous for the owner as it decreases tariffs and taxes

Offsetting of the excess power production with the supplier: the surplus of injected energy is credited in kWh/cash to the prosumer

Netting schemes

- Net billing – is valued below the retail price. It nets consumption only instantaneously.
- Net metering – total excess energy is valued at volumetric retail price. Allows calculation of the accumulated energy exchange **over a specified netting interval** (N1: 1H/1 month/1 year)
- $a + b = \text{total imports} + \text{total exports}$ for a N1 = 1h.
- If $a > b$, only imports $(a-b)$ are reported and zero exports
- If $a < b$, only exports $(b-a)$ are reported and zero imports

These reported values are always smaller than real exchanges with network ★

Netting schemes

Yearly energy imports and exports depending on the N1 and summation vs per phase*

Energy n kWh	Summation monthly	Summation per h	Summation per s	Per phase per s
Imports	371	1087	1204	1459
Exports	4065	4781	4899	5148
Difference	3694	3694	3695	3689

Cost components and revenue under the different net metering methods for a yearly period*

	Summation per h	Summation per s	Per phase per s
Revenue	148	152	159
Energy cost	38	42	51
Grid fees	51	57	69
Taxes and VAT	181	201	243
Net cost	122	148	204

Inter- TSO compensations

- ITC mechanism allows TSOs to receive a compensation for the costs of hosting cross-border flows on their networks. This compensation shall be paid by the operators of national transmission systems from which cross-border flows originate and the systems where those flows end.
- Pursuant to Commission Regulation (EU) 838/2010, two types of costs shall be compensated:
 - ✓ the costs of losses due to hosting cross-border flows of electricity and
 - ✓ the costs of making infrastructure available to host these cross-border flows.

Unintended deviations between TSOs

- Due to the physical nature of an interconnected network, there are unavoidably deviations between the intended exchange and the actual physical flow – unintended exchange. There are three different components of these deviations:
 - frequency containment process energy - FCP energy - results from the activation of FCR across the synchronous area and is an intended component,
 - ramping period energy - RPE - results from the application of ramps to the scheduled exchanges and is also an intended component, and the third component is
 - actual unintended exchange.
- FSKAR process allows the accounting and settlement of these three components with a price.

Unintended deviations between TSOs

- Article 184 of the EU VAT Directive :


The initial deduction shall be adjusted where it is higher or lower than that to which the taxable person was entitled

- Under Article 185 of EU VAT Directive:

1. **Adjustment shall**, in particular, be made where, after the VAT return is made, some change occurs in the factors used to determine the amount to be deducted, for example where purchases are cancelled or price reductions are obtained.
2. By way of derogation from paragraph 1, **no adjustment** shall be made in the case of transactions remaining totally or partially unpaid or in the case of destruction, **loss** or theft of property duly proved or confirmed, ...

Unintended deviations between TSOs

- Decision of EU Court of Justice C-127/22 „BTK“ EAD

The writing off goods which the taxable person considered to have become unusable in the course of his or her usual economic activities, followed by the sale of those goods as waste, which was subject to VAT, does not constitute a ‘change ... in the factors used to determine the amount to be deducted’, within the meaning of Art. 185 of the EU VAT Directive.  **No adjustment**

Unintended deviations between TSOs

- The VAT Committee almost unanimously agrees that **small losses** of goods under call-off stock arrangements (Article 17a of the VAT Directive) arising from:
 - ✓ the actual nature of the goods,
 - ✓ unforeseeable circumstances or
 - ✓ an authorisation or instruction by the competent authorities

shall not give rise to a transfer of these goods within the meaning of Article 17 of the VAT Directive.

Unintended deviations between TSOs

- Furthermore, the VAT Committee, at large majority, agrees that for the purposes of such call-off stock arrangements, **“small losses”** shall be taken to mean losses that amount to **below 5%** in terms of value or quantity of the total stock as it stands:
 - ✓ on the date, after arrival at the place of storage, that the goods are actually removed or destroyed or, if it is impossible
 - ✓ to determine that date, the date on which the goods are found to have been destroyed or missing

Relations in citizens' energy communities

- CO2 emission allowances
- VAT Groups
- Cost sharing arrangements
- Others: re-invoicing, charging of e-vehicles

CO2 emission allowances (1)

VAT Committee guidelines:

1. The VAT treatment of the transfer of emission allowances
(unanimous):

✓ *the transfer of greenhouse gas emission allowances when made for consideration by a taxable person is a taxable supply of services*

✓ *Place of supply:*

B2B – at the place of establishment of the recipient (Articles 44 of the EU VAT Directive)

B2C - services supplied to customers outside the Community (59(a) of the VAT Directive).

✓ *None of the exemptions provided for in Articles 132 and 135 of the VAT Directive can be applied to these transfers of allowances".*

CO2 emission allowances (2)

VAT Committee guidelines:

2. Auctioning of emission allowances by Member States *(almost unanimous):*

- ✓ the auctioning of allowances by Member States under the revised EU Emission Trading Scheme shall constitute an economic activity within the meaning of the VAT Directive and that the supply of such allowances shall be regarded as a supply of services.
- ✓ where a public body is acting as the seller (auctioneer) in an auction, such an activity shall, given the risk of significant distortion of competition, be subject to VAT

CO2 emission allowances (3)

VAT Committee guidelines (unanimous):

3. Exemption from VAT of emission allowances by Member States (as financial instruments)  NO

- ✓ Exemptions from VAT contained in the EU VAT Directive are to be interpreted strictly, independent EU concepts
- ✓ The treatment as financial instrument under MiFiD II serves a different specific purpose

CO2 emission allowances (4)

Domestic reverse charge – Art. 199a of the EU VAT Directive

- Transfer of allowances to emit greenhouse gases
- Supplies of gas and electricity to a taxable dealer
- Supplies of gas and electricity certificates (Certificates of origin)



OPTION

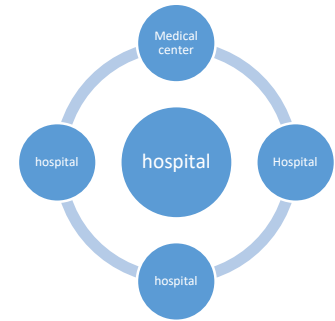


Until 31 December 2026



Information and reporting obligations of MS before the VAT Committee

Cost sharing arrangements



VAT exemption of:

- supply of services
- Within an independent group of persons, who are carrying on an activity which is exempt from VAT or in relation to which they are not taxable persons
- for the purpose of rendering their members the services directly necessary for the exercise of that activity
- where those groups merely claim from their members exact reimbursement of their share of the joint expenses
- provided that such exemption is not likely to cause distortion of competition

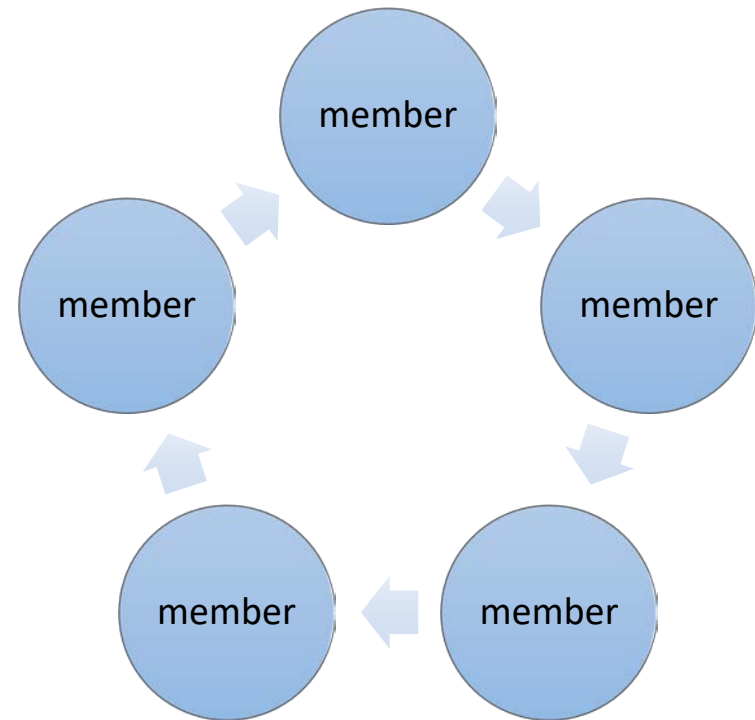
VAT Groups

The option for an EU MS to regard **as a single taxable** person any persons established in the territory of that Member State who, while legally independent, are closely bound to one another by :

1. financial
2. economic and
3. organizational links.



the supplies for consideration
between the members
are disregarded for VAT



Conclusions

- VAT specificities to not hinder or obstruct cross-border trading in electricity
- Reducing compliance costs and administrative burden (registration, reporting and payment of obligations (reverse charge))
- Promoting anti-fraud measures
- Sharing and adoption of good practices

Links and sources

- EU VAT Directive - <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006L0112-20220701&qid=1683965784386>
- VAT Committee Guidelines - https://taxation-customs.ec.europa.eu/system/files/2023-04/guidelines-vat-committee-meetings_en.pdf
- Decisions of the Court of Justice of the EU - <https://curia.europa.eu/juris/recherche.jsf?language=en#>
- Taxes in Europe Data Base (TEDB) - https://ec.europa.eu/taxation_customs/tedb/taxSearch.html

Thank you!

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