

29 September 2022

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# EBA response to the European Commission on the current level of margins and of excessive volatility in energy derivatives markets

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## Executive summary

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The European Commission has asked the European Banking Authority (EBA) to consider the following three questions<sup>1</sup>:

- Explore possible ways to facilitate the provision of guarantees that could be posted as collateral by non-financial counterparties.
- Assess how and to what extent banks currently provide collateral transformation services.
- Consider any possible other measures to minimise the liquidity challenges currently faced by energy companies, including ways to improve the transparency, volatility and predictability of margin calls, in particular intraday.

The EBA response provides an initial analysis and stock-take of the situation as there is limited data available to underpin the anecdotal evidence that the EBA has been able to collect within the short timeframe provided. The EBA response reflects discussions with several larger banks active in energy derivatives markets, energy exchanges, credit rating agencies and industry associations, as well as a number of supervisory and regulatory considerations.

With respect to the first question, market-based solutions, where banks provide clearing services to energy firms, are already in place today. Bank guarantees are currently used to some extent to support energy firms, typically as collateral for credit lines, with the guarantee being given from one bank to another. For practical and administrative reasons, bank guarantees are, however, not the preferred solution by market participants (banks as well as central clearing counterparties (CCPs)) and the use of credit lines is the norm. Hence, regardless of whether CCPs are in a position or not to accept uncollateralised bank guarantees, banks, as part of their own support efforts towards energy companies, can already take those bank guarantees as collateral as part of their collateral transformation services.

With respect to the second question, the available evidence clearly indicates that banks are already providing significant levels of support to energy companies by facilitating the posting of collateral towards CCPs. This support includes the provision of so-called collateral transformation services to their clients. Support from banks to energy firms has grown rapidly over the last six months, and banks are reaching a point where internal risk limits are beginning to bind. There is at present little evidence that suggests that regulatory constraints have been or are impediments to this support.

With respect to the third question, the EBA has not identified any potential changes to the prudential framework, which can effectively help alleviate the current situation. This reflects the

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<sup>1</sup> The European Securities and Markets Authority (ESMA) has also been asked by the European Commission to consider a number of related issues on the functioning of energy derivative markets that are under its purview. ESMA's initial response was published on 22 September. The EBA's response is linked to the one provided by ESMA and has been done in close collaboration with ESMA.

fact that most of the binding constraints that the EBA has identified stem from existing internal risk management limits and constraints decided upon by banks and/or CCPs as a result of their risk appetites and sustained flows of business with customers and counterparties. Banks are, however, facing significant liquidity draws – including in USD – in some cases with quite short notice when there are significant market movements. Efforts to provide more transparency around margin calls would, therefore, be welcome.

Among the current regulatory requirements which may, somehow, alleviate the current situation or at least provide a signalling effect, several areas in the regulation have been considered, namely:

- With respect to bank guarantees, the EBA response provides clarity on the recognition of bank guarantees in the Credit Risk Mitigation (CRM) framework of the Capital Requirements Regulation (CRR). It is noted that these can be used, already today, as unfunded credit protection, if the conditions set out in the CRR are met.
- Market risk and prudent valuation requirements have increased, reflecting heightened global uncertainty. Similar to the COVID-19 crisis, supervisory relief measures could be considered. The EBA is continuing to monitor the situation and will take action, should this be justified by the circumstances.

The overall EBA assessment is that banks have been actively engaging with energy companies to provide them with a wide range of services to manage existing volatility in derivative energy markets. As a result, banks have significantly increased their overall exposure to the sector. Overall, the EBA is of the view that the prudential framework is robust and designed to hold in normal as well as in more challenging times such as the current situation. The EBA is, on balance, of the view that at the current juncture relaxation of prudential standards could have unintended consequences and erode the soundness and risk sensitivity of the regulation. There is however also agreement that the current difficult situation deserves a continued careful monitoring and assessment, in collaboration with ESMA.

## Contents

<b>1. Introduction</b>	<b>5</b>
<b>2. Role of banks in supporting energy firms</b>	<b>7</b>
2.1 Banks support to energy firms	7
2.2 Prudential considerations for credit institutions supporting energy companies	11
<b>3. Reducing the liquidity challenges currently faced by energy companies</b>	<b>12</b>
3.1 Ways to facilitate the provision of bank guarantees as collateral to CCPs	13
3.2 Collateral transformation services	115
3.3 Possible other measures to minimise the liquidity challenges currently faced by energy companies	117
<b>Annex A: EU banks' exposures to energy firms</b>	<b>22</b>
<b>Annex B: Credit risk framework</b>	<b>27</b>
<b>Annex C: Public guarantees already provided</b>	<b>29</b>

# 1. Introduction

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1. On 13 September, the European Commission asked the EBA to consider possible responses to the current levels of margins and the excessive volatility in energy derivatives markets, with the objective of providing support to energy companies<sup>2</sup>. These considerations are taking place against the background of rapid increases in EU energy prices. As a result, CCPs require energy firms to post additional collateral, also called margin requirements on energy derivatives used for price hedging by energy firms. Should energy firms ultimately be unable to meet these margin calls, thereby defaulting, this may trigger market disruptions.
2. The EBA welcomes the opportunity to react to the issues raised by the Commission, which are timely and highly relevant considering the current situation in the EU wholesale market for energy, although highly complex to solve. By raising the issue at a time when energy market participants are still meeting margin requirements, solutions can be found before market disruptions occur. Furthermore, time is of the essence given that winter is coming, which will increase the demand for energy and hence put additional stress on a market that is already under pressure. The increase in the level and volatility of energy prices is driven largely by the significant disruptions to the EU energy supply markets since the Russian invasion of Ukraine. The increases in prices and volatility consequently reflect a significant increase in real economic risk.
3. Banks play a key role as they provide clearing services for energy firms active in derivative markets. In this role, they interface with CCPs on behalf of their clients. This involves ensuring that required cash collateral for open positions is posted with the CCP. However, it also involves some degree of short-term credit extension towards energy firms, especially when those clear themselves on CCPs. Against this background, the Commission asked EBA to reflect on the role financial institutions play, according to the following points:
  - Exploring possible ways to facilitate the provision of guarantees that could be posted as collateral by non-financial counterparties.
  - Assessing how and to what extent banks currently provide collateral transformation services.
  - Considering any possible other measures to minimise the liquidity challenges currently faced by energy companies, including ways to improve the transparency, volatility and predictability of margin calls, in particular intraday.
4. This note is the EBA's response to this request and should be considered as representing a preliminary view only, given the short time for preparation. However, it is based on issues raised by supervisors, banks, CCPs and other market participants and as such considers the main

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<sup>2</sup> Ref. Ares(2022)6317709 – 13/09/2022

challenges which have been raised to the EBA. It should be noted that the EBA has considered the most recently available data submitted by EU banks, which covers the end-June 2022. EBA is mindful of the significant energy market developments that have since taken place, in particular over the last weeks of August.

5. Margin requirements reflect the introduction of the regulatory mandated use of CCPs and associated margin requirements in response to the 2008-2009 financial crisis. Higher margins in response to market developments are an intended consequence of these reforms and help ensure that the financial system is more robust. Hence, any change in margin requirements should be considered in the spectrum of the resilience of the financial system. Weakening CCPs would result in additional risk being held by banks and other clearing members.
6. When banks support their clients in meeting margin requirements this is typically done by providing direct loans in the form of short-term credit facilities. They can also help by providing guarantees to meet margin requirements from CCPs, should the latter choose to accept guarantees as collateral. Should banks decide to take additional risk (via either loans or guarantees) when supporting their clients, they will be required to capitalise the higher potential losses they face as a result.
7. Section 2 illustrates the role of banks in energy derivatives markets today (directly or through funding offered to energy firms) as well as the functioning of these markets from a risk allocation perspective. The available evidence and discussion with banks clearly indicate that the relatively small number of European banks actively involved in this market have markedly increased support to their clients over the past six months. Market-based solutions have thus ensured collateral demands were met.
8. Banks' ability to provide further support for additional market-based measures will, however, need to consider the already higher levels of support provided, the extent of exposure to individual clients, the overall exposure to the energy sector and, more in general, the current high level of geopolitical risk. Given that banks have stepped up in this role, their capacity to support further increases in margin requirements appears to some extent, albeit not fully, to have been used at this stage. It is also clear that banks are becoming more and more cautious in taking on additional risk in order to support their clients. Going forward, it is likely that banks will become more selective in providing further support.
9. Section 3 considers possible measures which may help reduce the liquidity challenges energy companies currently face. One important takeaway is that banks have already provided liquidity support to a significant extent. The particular form of support provided is less relevant. It can take the form of guarantees, but the use of credit lines seems to be the preferred choice as this is independent from individual CCP requirements.

## 2. Role of banks in supporting energy firms

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### 2.1 Banks support to energy firms

10. Large banks play a key role in the energy derivative markets, both as clearing members for their energy firm clients and more broadly through the provision of credit and funding. In both cases, from discussions held with industry and from the data gathered, it appears that banks have already provided substantial support to energy firms.

#### Banks extension of credit to energy firms

11. Banks provide credit to energy firms as they would do to other customers. Banks appear to have markedly increased their provision of loans and credit lines to support energy firms since energy prices and volatility have begun to rise (see Annex).

12. As of March 2022, EU banks had around EUR 320bn outstanding loans and advances towards energy companies (electricity, gas, steam and air condition supply<sup>3</sup>). This represents an increase of their exposures towards these sectors by almost EUR 50bn since June 2021 (or 18% YoY), which in part can be explained by the energy crisis and the support to companies related to the production and supply of energy. Preliminary data for Q2 2022, show a marginal increase in outstanding loans by EUR 4bn (+1% QoQ). Based on bilateral discussions with active banks in the space of commodity business, banks have further increased their exposure, supporting energy companies to meet liquidity margin calls during and towards the end of Q3.

13. EU banks reported just above EUR 50bn of commodity derivatives financial assets<sup>4</sup>, as of Q1 2022. The EBA supervisory data shows that these exposures have more than doubled compared to Q2 2021, and the preliminary data for Q2 2022 reveal a further increase by 10%. Commodity derivatives represent around 3.5% of the total EU banks' derivative exposures and less than 0.2% of their total assets. It is estimated that of the total commodity derivative business, roughly 40% is energy related.

#### Banks role as clearing brokers

14. Banks provide collateral transformation services to facilitate derivatives clearing for energy firms. This is done in a variety of ways, but it generally involves banks providing cash or highly liquid bonds to energy firms in exchange for less liquid collateral and applying appropriate haircuts.

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<sup>3</sup> Representing NACE code D.

<sup>4</sup> Carrying amount of Financial assets held for trading and trading

15. Although several banks have communicated their willingness to expand the forms of collateral they accept, anecdotal evidence suggests that there have been limited demands for collateral transformation by banks. This may be due to the lack of collateral held by energy firms.
16. As clearing members, banks have to meet CCP margin calls on behalf of clients. This is done both intraday and end of day. When banks post margin amounts on behalf of clients, there is a time gap, before they receive the corresponding margin amounts from their clients. Hence, clearing member banks have to bridge both intraday or overnight funding gaps that may have materialised due to sudden market corrections affecting energy prices. In case of significant price moves, the amount of collateral needed can be substantial.
17. CCPs require collateral from their members to ensure that they can guarantee the performance of the contracts to which they are a counterparty in case of default of one of their members. Collateral demands stem from two types of margins - variation margins and initial margins. While variation margins cover the day-to-day change in the market value of the clearing member's positions, initial margins are an additional buffer of collateral provided by the clearing member to the CCP to be used in case of its default.
18. If a clearing member does not answer a margin call, the CCP declares the clearing member's default and seizes those margins to cover potential losses. The clearing member's positions are closed and replacement contracts are put in place. This can have price effects on the market, as the CCP may not be able to close those contracts at current market prices. For these reasons, the European Market Infrastructure Regulation (EMIR) requires clearing members that clear transactions on behalf of their clients to have the necessary additional financial resources and operational capacity to perform this activity<sup>5</sup>.
19. The provisioning of clearing services inherently involves banks supplying liquidity to the clients. The main challenge has been the magnitude and frequency of the collateral demands, which substantially exceed what was previously required of banks and their clients. The EBA has, however, not been aware of any cases of missed margin calls, even during the peaks of energy prices, suggesting that banks and their clients have handled the situation, despite the challenges.

### Limiting factors

20. There is a limited number of banks, that provide clearing services to energy firms. This reflects the high operational complexity of clearing services, as well as the need for economies of scale needed for banks from a commercial perspective. At the same time, due to a high degree of price stability prior to the current situation, energy firms have historically had limited funding needs for clearing purposes.
21. Based on March 2022 data, the commodity derivative exposures are rather concentrated in a few banks. The biggest bank reports more than 40% of the total commodity derivative exposure,

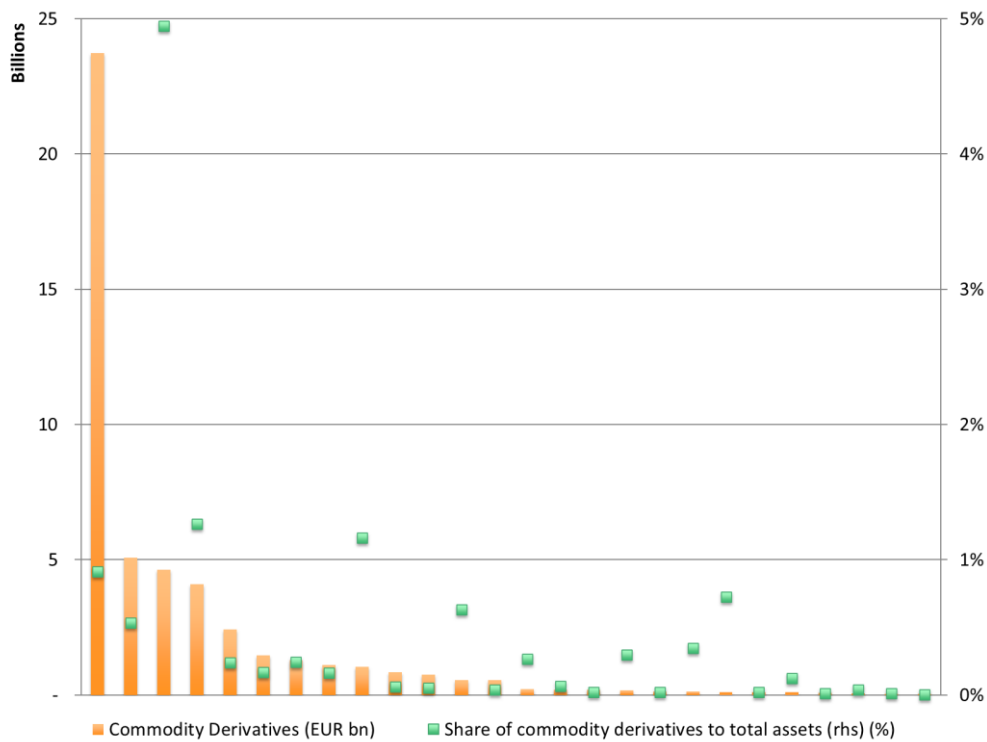
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<sup>5</sup> EMIR Article 37.



while the top 10 banks close to 90%. Yet just one bank has more than 5% of its total assets in commodity derivatives (Figure 1).

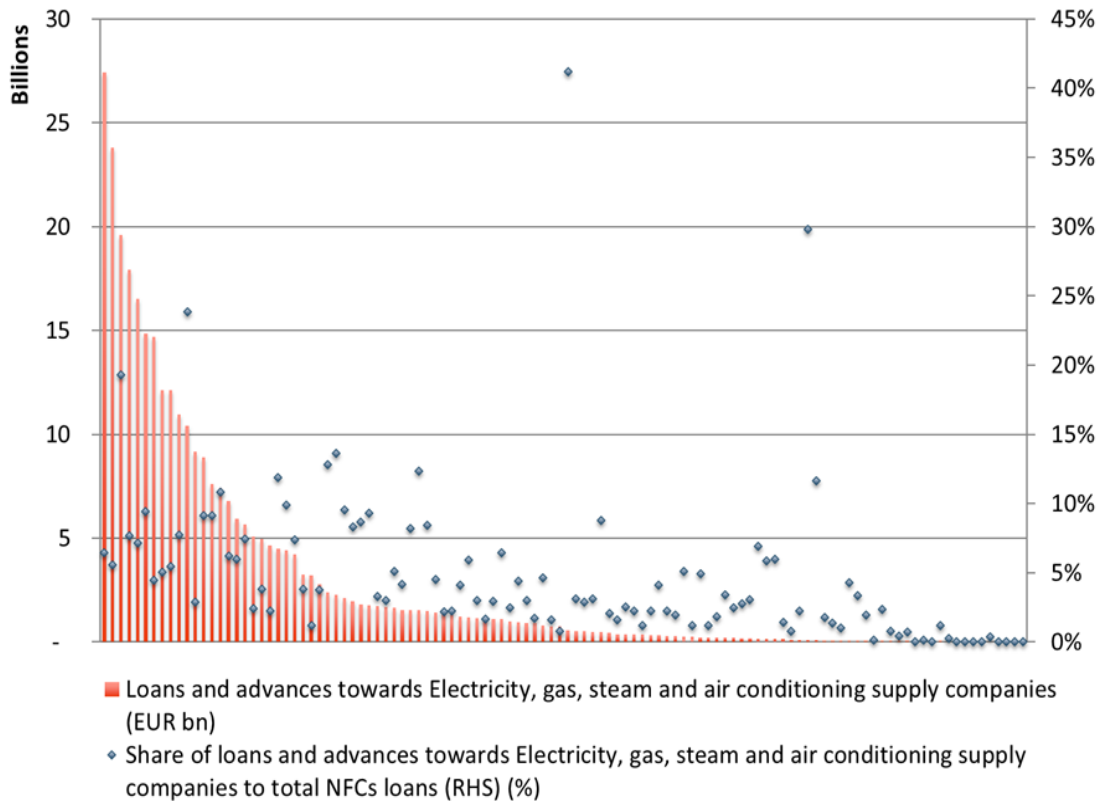
Figure 1: Bank by bank commodity financial assets held for trading and trading derivatives (carrying amount, EUR bn) and as a share of total assets (%) – March 2022



Source: EBA Supervisory data

22. Loans towards energy companies are also rather concentrated in a small number of banks. 10 banks hold more than 50% of the total loans, and the top 20 banks with the largest exposures towards the energy sector report more than 75% of the total loans towards the energy sector. These banks report at least EUR 5bn of loans and advances towards the energy sector, please see Figure 2.

Figure 2: Loans and advances towards energy sector (EUR bn) and share of loans to energy sector to total by bank (%) – March 2022



Source: EBA Supervisory data

23. Supervisory data confirms the view that large exposure limits are not binding, at least for those banks that are highly active in these markets. This is consistent with anecdotal evidence provided by a number of banks and market participants, suggesting that banks' internal risk management (e.g. internal risk limits) is the main constraining factor in expanding their support. This should be seen in a context where banks face increased geo-political uncertainty in combination with high inflation across all major economies, resulting in elevated asset price correlation risks. Against this backdrop, some banks have become more cautious with respect to further increases in their energy sector exposures, but all firms, which the EBA has engaged with, stressed their willingness to support the energy sector to the extent possible.

24. CCPs are of course also operating with internal limits vis-à-vis their clearing members. Some of the feedback received from the industry also indicates that CCPs' risk management may limit banks to further support their clients, as CCPs also seek to limit concentration and correlation risks.

25. In conclusion, banks have already provided substantial support to energy firms, but their risk appetite seems to be the major constraint limiting additional support to energy firms.

## 2.2 Prudential considerations for credit institutions supporting energy companies

26. Regulatory requirements are not perceived by industry stakeholders as a material factor in addressing the challenges faced by EU energy companies. However, a number of regulatory requirements interact in this context and were mentioned as elements, which banks need to consider in their decision process. These elements include large exposures, liquidity rules, credit and counterparty credit risk and market risk, which are considered in more detail below.
27. Regulatory constraints in the form of large exposure limits cap the maximum amount of credit that can be granted to energy corporates. The large exposure framework was not signalled by the industry as an impediment in the provision of capital towards energy firms, be it through single-name or sectoral large exposure limits embedded in the prudential regulation. Nor was this identified as a potential constraint from the available supervisory data collected by the EBA. Therefore, there is no need to amend the large exposures framework against the backdrop of the current crisis. It should be stressed, that the large exposure framework is a key backstop measure that protects institutions from incurring disproportionately large losses as a result of the failure of an individual client or group of connected clients. Similar to banks, CCPs are also required to have exposure limits in place towards individual banks/counterparts.
28. Regarding liquidity, the industry voiced concerns in the cases where the currency of funding when meeting margin calls is set to US dollars, which adds a layer of difficulty for EU banks, for instance due to managing time zone differences and access to central bank funding. This is compounded with CCPs working with a restricted set of US-based corresponding banks, which adds complexity when meeting variation margins at short notice, also in terms of time zone. These impediments are related to the design of CCPs and, therefore, are outside of the remit of the EBA.
29. Counterparty credit risk is also incurred whenever collateral transformation is provided to clients, for example in the form of margin waivers. In the case of margin waivers, banks will have instead a direct counterparty credit risk exposure towards the energy firm, thereby losing the beneficial effects in terms of the capital relief provided by margining. This holds both under the internal model method (IMM) and the standardised approach for counterparty credit risk (SA-CCR), i.e. the more advanced counterparty credit risk methods used by the largest institutions. But margin benefits may also be lost when clients are allowed by clearing members to post collateral, which does not qualify as eligible under the regulatory framework<sup>6</sup>. Even though guarantees are not eligible funded credit protection for the reduction of the exposure, they will be eligible unfunded credit protection, subject to meeting the requirements set out in the CRM framework, leading to possibly lower risk weights applied to the transactions in recognition of the risk mitigation effect.

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<sup>6</sup> For IMM banks, eligible collateral is listed in Articles 197, 198 and points (c) and (d) of 299(2) of the CRR, for SA-CCR banks in Articles 197 and 299 of the CRR

30. Furthermore, the EBA has received feedback from the industry on the calibration of commodity supervisory factors under SA-CCR (40% for transactions concerning electricity and 18% for other commodities), which was considered as excessively high, in particular compared to other asset classes (supervisory factors range from 0.38% to 6% for interest rate, FX and credit). In addition, the elevated volatility in energy markets is also expected to impact the internal model approach (IMA) for market risk used by most of those large banks by increasing value-at-risk (VaR) risk metrics. This can cause back-testing overshootings<sup>7</sup>, possibly triggering an increase in the VaR back-testing multiplier add-on.
31. The industry has not identified shortcomings in the regulation regarding the instruments available to banks for the provision of collateral to CCPs. Credit granting is purportedly not hindered by the different costs of regulatory capital associated with the available pool of instruments that may be issued, but rather with the risk appetite from banks in the further provision of credit.
32. Overall, there are no indications that the prudential framework is a material limitation to banks' ability to provide liquidity support. The industry has nonetheless highlighted that any support measure would be welcome.

### 3. Reducing the liquidity challenges currently faced by energy companies

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33. According to the evidence collected by the EBA, the financial sector is already providing significant support for the regular functioning of the energy market. This is done in the form of collateral transformation, provision of bank guarantees to clients and most notably credit lines. The EBA is of the view that under the current prudential framework banks already have a wide range of instruments available to provide funding to energy firms.
34. In particular, the EBA noted that the limitations seem more related to the overall risk appetite of banks, and the identified potential adjustments to the framework seem unlikely to materially address the situation. At the same time, any support in terms of less restrictive regulatory requirements, for instance by adjusting the risk weighting scheme or recognising revocable bank guarantees as eligible collateral in the CRM framework, while it may add to the flexibility of institutions, may also result in increases in vulnerabilities to financial stability. Overall, the EBA is firmly of the view that the relaxation of prudential standards could potentially lead to

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<sup>7</sup> Article 366(4) currently allows competent authorities in individual cases to limit the addend to that resulting from overshootings under hypothetical changes, where the number of overshootings under actual changes does not result from deficiencies in the internal model. This provision, however, proved to be of limited use during the COVID crisis and a broader discretion was granted for competent authorities to exclude overshootings stemming from both actual and hypothetical changes under the CRR quick fix.

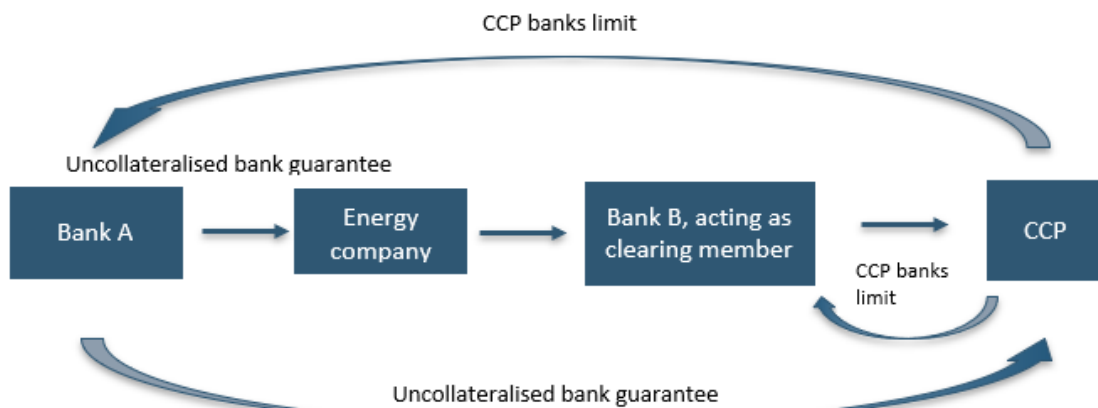
unintended consequences and erode the soundness and risk-sensitiveness of the regulation. The EBA will nonetheless continue to monitor the situation.

### 3.1 Ways to facilitate the provision of bank guarantees as collateral to CCPs

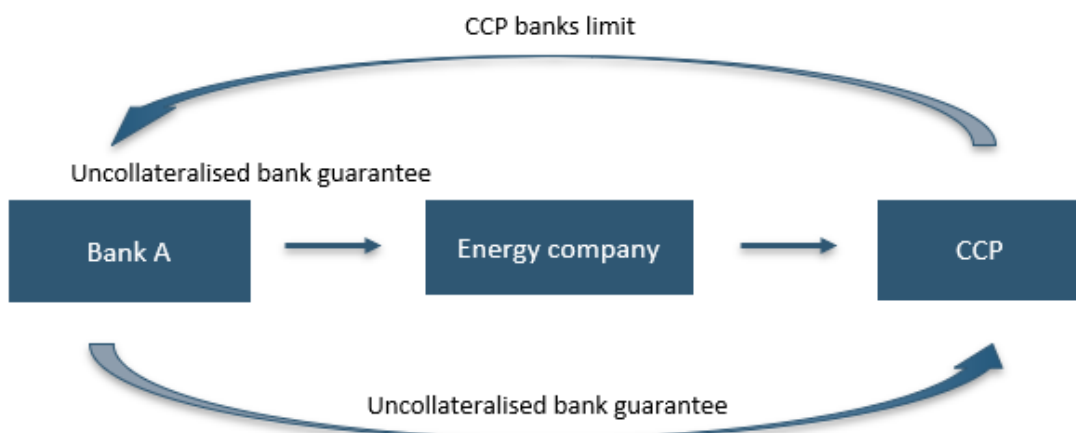
35. The Commission has, in particular, requested the EBA to consider potential ways to facilitate the provision of guarantees that could be posted as collateral by non-financial counterparties. This is in direct connection to the similar request addressed to ESMA to review the framework applicable to bank and central bank guarantees to allow for an easier and greater issuance and usage of this type of collateral. ESMA's response to the Commission was published on 22 September 2022, indicating that allowing uncollateralised bank guarantees to be accepted by CCPs as eligible collateral should be considered only under strict conditions, notably as a measure of a temporary nature and associated with concentration limits by CCPs, where uncollateralised bank guarantees would only be allowed to represent a small share of the total amount of the initial margin requirement.
36. The EBA believes that the existing requirements on collateral, as well as the conditions set out by ESMA in its letter to the Commission, should be met. They ensure that, in the case of bank guarantees, the CCP does not assume wrong way risk. This aspect has a bearing on the willingness of the CCP to accept the bank guarantee as collateral and is therefore relevant when considering the use of uncollateralised bank guarantees as collateral (see below).
37. From a prudential perspective, it is clear that there are currently no obstacles for banks to provide uncollateralised guarantees. In particular, if ESMA and the Commission were to press ahead with changes to the CCP framework that would allow uncollateralised bank guarantees to become eligible collateral, such guarantees can already be easily issued today. In fact, they are already used, albeit as collateral for clearing members, rather than as collateral for CCPs.
38. Exhibit A below shows an illustration of uncollateralised bank guarantees in the context of collateral posting by energy companies, both under the indirect model of access of the energy company to the CCP (i.e., through a bank acting as a clearing member) and the direct model of access to the CCP (energy firm is a clearing member of the CCP). The credit risk capital requirements of Bank A for the issuance of the uncollateralised bank guarantees will require using respectively the standardised approach (SA), foundation internal ratings-based (IRB) approach or advanced IRB to determine the relevant risk weight. In both cases, the CCP will be exposed to the credit risk on Bank A.

### Exhibit A: Pass-through uncollateralized bank guarantees

#### Exhibit A.1: Indirect model of energy company access to CCP



#### Exhibit A.2: Direct model of energy company access to CCP



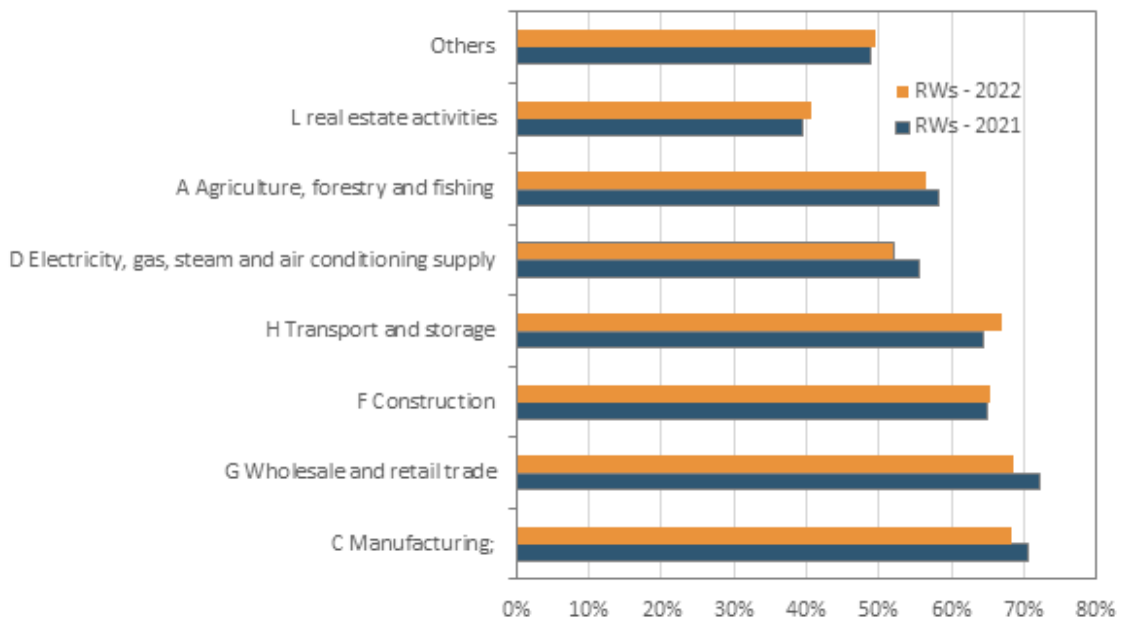
39. In terms of capital requirements, a bank that issues an uncollateralised guarantee will face higher capital requirements than a bank that issues a guarantee that is collateralised with eligible collateral.

40. A bank that issues a guarantee is subject to the same capital requirement as for an outright loan to the guaranteed party. In contrast, an undrawn credit line is subject to a conversion factor, i.e. a capital charge applies to less than the notional amount of the undrawn line.<sup>8</sup> For banks with advanced internal models a general assessment of the relative cost of regulatory capital by instrument is not available, as conversion factors are based on their own modelling. As to the

<sup>8</sup> See Table 1 in the annex for a stylized assessment of the current supervisory prescribed conversion factors.

risk weights (i.e. banks' estimates of PDs and LGDs), EBA benchmarking data indicates that implied risk-weights towards energy corporates are roughly half of those prescribed under the SA.

Figure 3: Implied risk weights assigned by A-IRB institutions towards corporates, by sector



Source: EBA Benchmarking exercise.

41. Potential amendments to the prudential framework to incentivise the use of uncollateralised bank guarantees could be considered, subject to strict conditions. Any adjustment to the framework should however be targeted and its applicability strictly limited in time, as the relaxation of prudential standards on the back of the current energy crisis could potentially lead to unintended consequences, reduce the relative risk sensitiveness between instruments and erode the soundness of the regulation. At this stage, the EBA is not in favour of making such changes, as it considers the framework to fully reflect the risks faced by banks. Furthermore, reducing capital requirements in periods of turmoil, where risks are generally higher, would be to the detriment of the financial stability of the banking system.

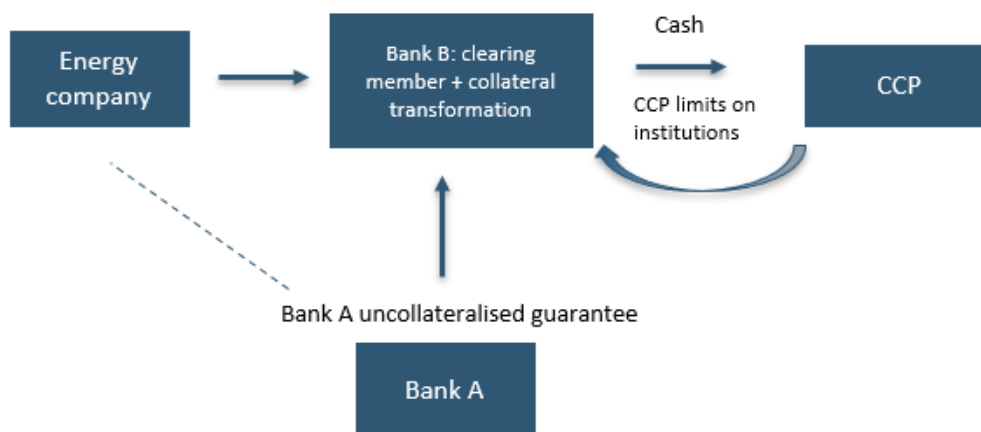
### 3.2 Collateral transformation services

42. Banks acting as clearing members can provide collateral transformation services to facilitate derivatives clearing by or for energy firms. These services typically include:

- Accepting bonds or other assets (e.g. emission certificates, see below) from energy firms in exchange for cash (or other forms of highly liquid collateral);

- Accepting letters of credit or guarantees issued by other banks in exchange for margin waivers (typically initial margins waivers as no waivers seem to be granted for variation margins).
43. Under the first point above, banks provide to non-financial counterparties collateral, typically cash, that can be posted to CCPs. In exchange, they receive from the non-financial counterparties other collateral which can be used to reduce their exposure. If the received collateral meets the requirements set out in the CRR, it is eligible to be considered under the calculation of the counterparty credit risk exposure value after having applied the appropriate haircuts. In such a case, the amount of cash provided will ultimately depend on the quantity and value of the assets posted as collateral by the non-financial counterparties. It is important to note that not all collateral is recognised under the regulatory counterparty credit risk framework, e.g. this is not the case for EU emission allowances.
44. Alternatively, clearing member banks can receive as collateral guarantees issued by other banks. When clearing members receive those items in exchange of waiving the non-financial client from posting (initial) margins, the CRM framework typically recognises the risk-reducing effects stemming from those unfunded protections.

**Exhibit B: Collateral transformation**



45. Exhibit B illustrates collateral transformation in the context of energy companies and the related posting of collateral to CCPs, using bank guarantees. Like exhibit A, the prudential framework related to Bank A requires the use of either the SA, foundation IRB or advanced IRB to determine the relevant risk weight. For bank B, who is now providing a credit line (collateral transformation), capital requirements on the credit line to the energy firm will be incurred. The CCP will no longer be exposed to the credit risk it was exposed to under Exhibit A above, as it will receive cash as collateral. Bank B could benefit from lower capital requirements through the CRM provided by the uncollateralised guarantee issued by Bank A. Institutions may use



guarantees as eligible unfunded credit protection<sup>9</sup>, subject to requirements, notably that the bank guarantee is to be irrevocable<sup>10</sup>.

46. Energy companies could potentially unlock further collateral if the CRM provisions were loosened to allow for revocable bank guarantees to become CRM eligible. Any potential amendment to CRR Article 213, which covers requirements common to guarantees and credit derivatives, should be strictly targeted to revocable bank guarantees and limited in time to avoid distorting the relative riskiness, unintended consequences and potentially impairing the soundness of the framework. At this stage, EBA is therefore not in favour of making such changes, as the EBA considers the framework to fully reflect the risk faced by banks.

### 3.3 Possible other measures to minimise the liquidity challenges currently faced by energy companies

#### 3.3.1 Targeted measures

47. This section deals with additional measures, which can be considered by the Commission. This includes identified issues related to intraday margin calls and the possible use of syndicated loans and participation agreements.

#### Enhancing transparency of intraday margin calls

48. In exploring the limitations of non-financial counterparties and banks in providing collateral in the context of the energy crisis, it appears that large adverse market movements in some cases triggered substantial intraday collateral calls. The EBA is aware that intraday collateral calls are a standard toolkit for CCPs and recognises their role to protect the CCP directly, as well as indirectly the whole set of CCP members from the accumulation of significant uncollateralised exposures. In terms of banks' liquidity management, sudden significant requests can easily exacerbate the liquidity shortage experienced in a crisis. Therefore, EBA would advise that these collateral calls be made in the most transparent possible manner, providing, where possible, a sufficient warning to the clearing members to facilitate the collateral provision within a reasonable timeframe. The EBA is, however, mindful that this request relates to the functioning of CCPs and is of the view that this is part of medium- and longer-term considerations on the functioning of CCPs, as also noted by ESMA in its response.

#### Syndicated loans

49. A syndicated loan is a provision of credit support offered by a group of lenders (the syndicate) to a single borrower. The loan can involve a fixed amount of funds, a credit line, or a combination of the two. Syndicated loans are typically used when financing needs require the provision of an amount which is too large for a single lender. Hence, syndicating the loan allows lenders to spread the risk and take part in financial opportunities that may be too large for their individual

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<sup>9</sup> CRR Article 203.

<sup>10</sup> CRR Article 213(1) point c.

capacity. In this sense, syndicated loans could also overcome concentration issues that smaller banks may face when asked to provide support to big energy companies. As large exposures limits are set as a percentage of banks' capital, smaller institutions are typically more constrained by those limits.

50. From anecdotal evidence, the EBA understands that in the past the use of syndicated loans to fund margin calls was perceived by the market as a bad signal, hence entailing a certain degree of reputational risk. However, it seems that the situation has changed and that, at the moment, it is a tool that market participants are more prone to use, considering the advantages in terms of risk sharing.

51. It remains that the operational efforts required to set up a syndicate of banks willing to contribute to the lending make this type of loan not very easy to set up, also considering some potential conditions banks need to meet to access the syndicate. In some cases, this results in reduced capacity of banks to provide such kind of service. In others, a relatively long time is needed before the loan goes live.

52. In the light of these considerations, the EBA is of the view that syndicated loans, while potentially providing some short-term relief to the issues at hand, should be rather seen as an additional useful instrument that energy companies should exploit in the mid- or long-term to face their liquidity needs.

### Participation agreements

53. Under participation agreements, an interest in an underlying loan is sold to one or more participants. A single lead lender, however, retains control over the loan, manages the relationship with the borrower and is responsible for originating and servicing the loan for both itself and the participants. On the one hand, the lead lender is the only one having an investment relationship with the borrower. The participants, on the other hand, only have an investment relationship with the lead lender and are thus not deemed creditors of the borrower, unless otherwise specified. Accordingly, they are not permitted to make claims against the borrower and can only request reimbursement for their participation from the lead lender.

54. In the context of support provided to energy firms for meeting their margin needs, a participation agreement could restore part of the lending capacity that a bank uses to lend collateral (typically in the form of cash) to its customer.

55. Gathered anecdotal evidence suggests the use of participation agreements in some instances. However, the current evidence does not enable the EBA to draw a clear conclusion on whether this sort of instrument is broadly used in practice, nor whether any potential regulatory amendments to recognise it as a risk mitigation tool should be considered.

### 3.3.2 Possible broader regulatory responses

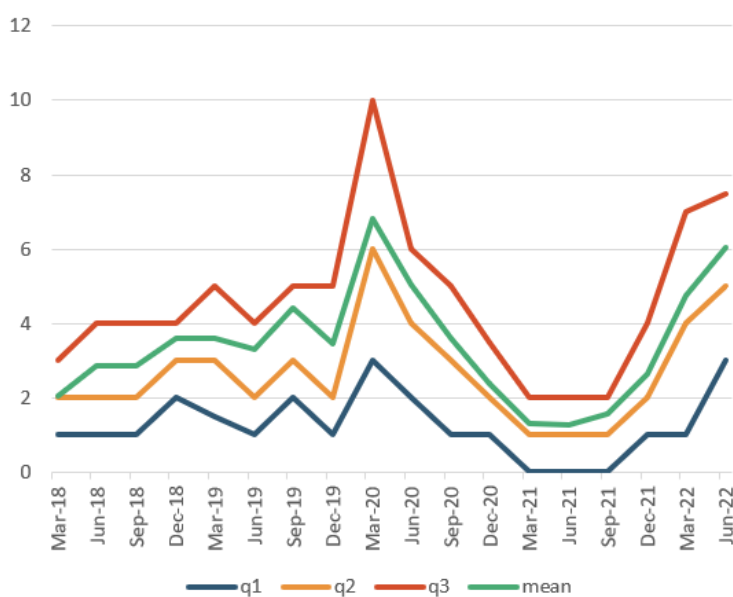
#### Measures to mitigate potential extreme volatility

56. In recent years, the case of large adverse market movements appears to have become more common place. In an environment already characterised by uncertainty around rising inflation, the Russian invasion of Ukraine has sparked volatility across financial markets reflecting heightened global uncertainty. Higher volatility tends to translate into higher market risk own funds requirements for banks using the IMA and higher Common Equity Tier 1 (CET1) deductions under prudent valuation for banks under the core approach. Large banks active in the commodity segment, but also other asset markets, are expected to be impacted on those two fronts.

57. The EBA supervisory data shows that recent market volatility has led to the increase in the VaR risk metrics used by banks. It should be recalled that the progressive adjustment of the VaR to new market conditions is an intended consequence of the framework, as higher volatility should increase the market risk faced by financial institutions.

58. Figure 4 below shows an increase in the number of backtesting overshootings recorded by the VaR of EU banks since Q4 2021. The EBA supervisory data shows that this has in turn triggered an increase in the VaR backtesting multiplier add-on applied by banks, as expected in such a case.

Figure 4: Number of backtesting overshootings, EU distribution



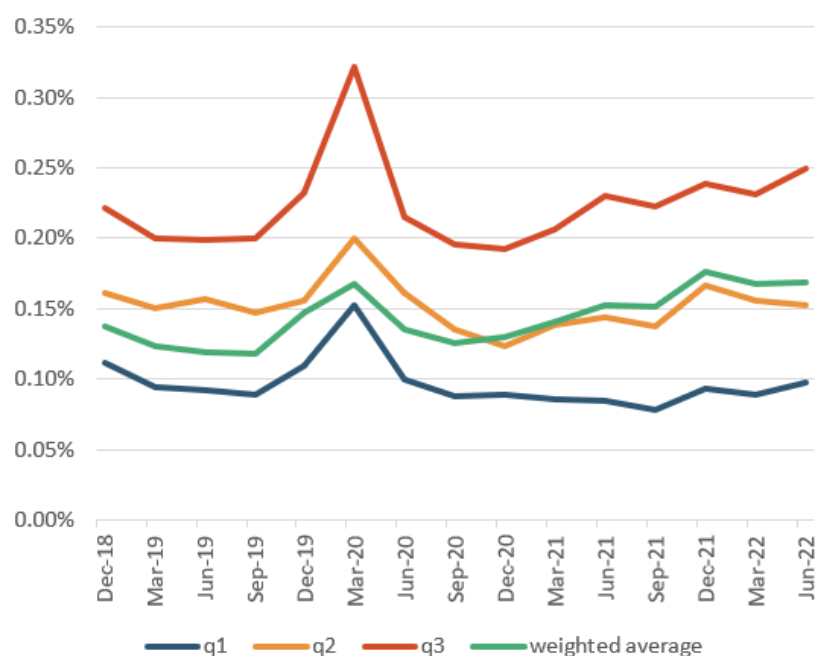
Source: EBA Supervisory data

59. Similarly, the prudent valuation framework being a point-in-time, forward-looking framework, an increase or decrease in market volatility can be expected to directly affect the calculation of

additional valuation adjustments (AVAs), since AVAs should, in general, mechanically adjust to fluctuating market conditions.

60. Figure 5 below shows an increase in Q4 2021 in the ratio of AVAs to fair value recorded by EU banks. As of June 2022, the ratio stands at around 0.152% for the median bank, lower than in March 2020 (0.200%). However, the opposite holds true for the EU weighted average (0.168% in March 2020 vs 0.169% in June 2022 and a peak at 0.176% in December 2021), which is driven by an increase in the ratio for a few of the largest banks in the sample.

Figure 5: Ratio of total AVAs to fair value included in PruVal threshold over time for banks under core approach, EU distribution



Source: EBA Supervisory data

61. In its [Statement on the application of the prudential framework on targeted aspects in the area of market risk in the COVID-19 outbreak](#), published on 22 April 2020, the EBA, acknowledging the levels of extreme volatility that the COVID-19 pandemic triggered throughout financial markets, proposed actions to mitigate the impact of extreme volatility on the VaR and AVA computations performed by banks, later usefully complemented by the CRR quick fix with respect to the VaR.

62. Recognising the importance of such measures in extraordinary circumstances, the CRR3 proposal<sup>11</sup> includes provisions to enshrine in level 1 powers for the EBA and competent authorities to be able to act should another crisis require action to mitigate the impact of extreme volatility on institutions.

<sup>11</sup> For prudent valuation: new subparagraph in Article 34; for discarding backtesting overshootings: new point c in Article 325az paragraph 9.

63. The EBA is aware of the similarities between the COVID-19 pandemic and the current energy crisis and will continue to closely monitor the situation, as well as assess the need to trigger these exceptional measures.

### Government guarantees

64. Given the lack of indication that the prudential framework is a material limitation to banks' ability to provide liquidity support, the likely limited impact of changes to the regulatory framework, the potential unintended consequences of any relaxation of prudential standards and the risk of another round of energy market unrest, government intervention should also be considered. Government intervention would alleviate the systemic impact that a further significant increase in energy prices may have on energy-intensive corporations and beyond. Therefore, it may be needed to avoid stability-threatening spillovers from stresses in the energy sector to the broader economy, banks, and the financial system. It should be stressed that the markets have been performing well so far, and this performance should be preserved from factors related to the current geopolitical situation. Similar considerations were expressed by virtually all the respondents to the EBA's bilateral consultations. Several governments have already provided public guarantees to ensure that energy producers and suppliers would be able to respond to the margin calls.

65. There are several lessons that can be learned from the government guarantees already provided (please refer to Annex C for a description of the public guarantees already provided by some Member States). First, the point of entry of the guarantee should be such that it helps address the liquidity needs of the clients or clearing members facing the CCP margin calls, and not only after the possible default of the counterparty facing the CCP. With respect to the bank involved, this includes ensuring that there are no breaches of single-name or sectoral concentration limits. Second, it should be ensured (similar to the Swedish example) that the CCP increases its single name concentration limit on the bank receiving the guarantee.

66. The benefit of an early entry point of the guarantees is twofold. Firstly, it may alleviate possible over-margining requests from the clearing members to the clients (i.e., requests for clients to provide margins in excess of the amounts of variation and initial margins needed, which can be used in case of exceptional margin calls), that in stressful circumstances could increase the collateral request to their clients with respect to what is asked by the CCP. Secondly, acting at an early stage (instead of when the default of a counterparty is declared) could avoid exacerbating the already complicated default management procedures of the CCPs (closing positions via auctioning).

67. In any case, it is clear that the nature of such measures is and should be temporary, as the aim is to alleviate energy companies from the momentary liquidity pressure. This type of interventions can be justified by the fact that energy is, by nature, a strategic sector, and, therefore, it should be preserved from possible disruptions in supply provision due to the financial distress of the relevant players.

# Annex A: EU banks' exposures to energy firms

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## EU banks exposures towards commodity derivatives

As of March 2022, the carrying amount of financial assets held for trading, corresponding to derivative instruments held by EU banks - for trading or hedging purposes -, was more than EUR 1.5tn, or close to 6% of their total assets. During Q2 2022, it had increased by more than EUR 300bn (+20%), according to preliminary supervisory data. Nevertheless, the current derivative exposure is still below the average of the period between Dec-14 and Jun-22 (EUR 1.9tn). Of these exposures only 3.5% is referenced to commodities (around EUR 50bn). Energy derivatives form the main business within commodity derivatives. They are estimated to be more than 40% of the reported commodity derivatives<sup>12</sup>.

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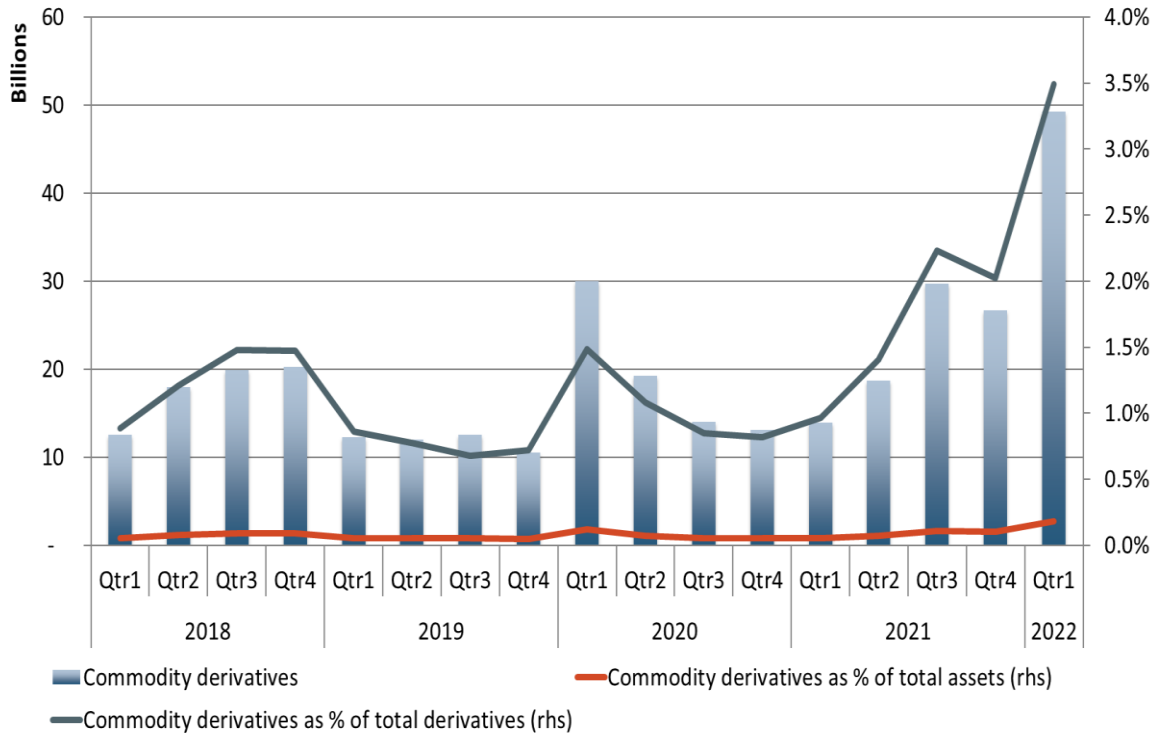
<sup>12</sup> Estimation based on Mar-22 Supervisory COREP data for banks using Standardised Approach. Same information is not available for banks using Internal models.

Figure 6: Derivative exposures in EUR bn and % share of derivative exposures to total exposures



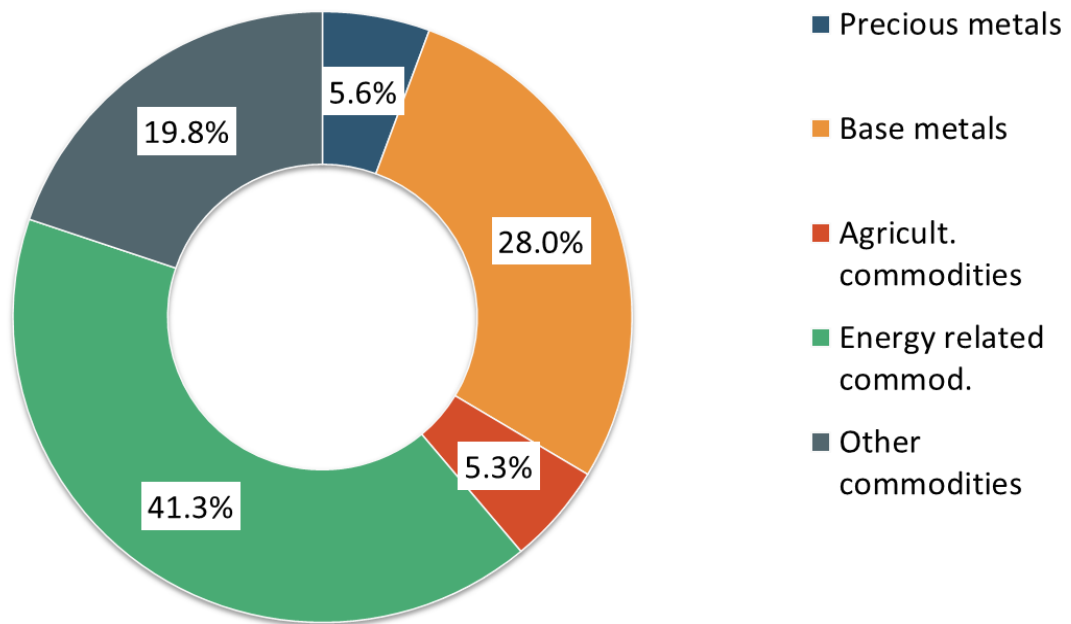
Source: EBA Supervisory data

Figure 7: Commodity financial assets held for trading and trading derivatives (EUR bn) and as a share of total derivative financial assets and total assets (%)



Source: EBA Supervisory data

Figure 8: Distribution of commodity derivatives by underlying product



Source: EBA Supervisory data

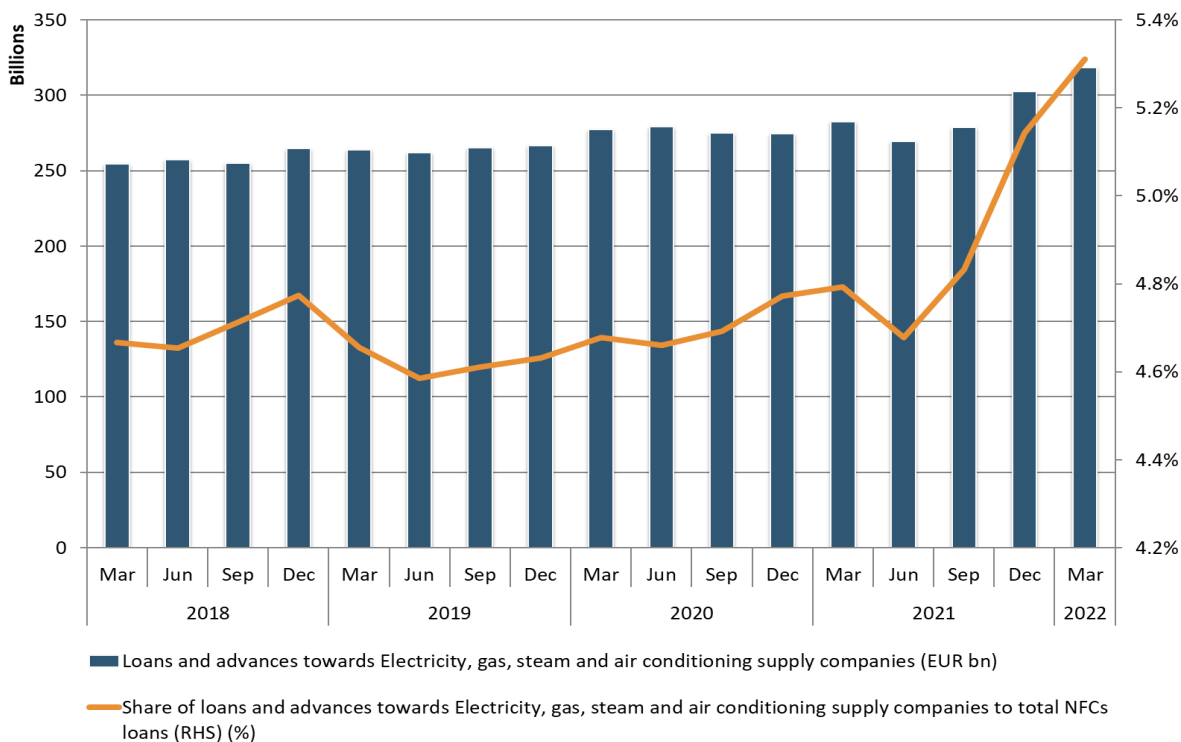
### EU banks exposures towards loans and advances to energy firms

As of March 2022, EU banks had around 320bn of outstanding loans and advances towards energy companies (electricity, gas, steam and air condition supply). This represents an increase of their exposures towards these sectors by almost EUR 50bn since June 2021 (or 18% YoY), which can be explained by the energy crisis and the support to companies related to the production and supply of energy. Preliminary data for Q2 2022, shows a marginal increase in outstanding loans by EUR 4bn (+1% QoQ).

The share of loans towards energy companies to total non-financial corporate loans has increased by around 50bps since June 2021, and in March 2022 was close to 5.3%. The share of outstanding loans towards the energy sector is only just above 1.2% of banks' total assets.



Figure 9: Loans and advances towards energy sector companies and share of loans towards energy sector companies as % of total NFCs loans



Source: EBA Supervisory data

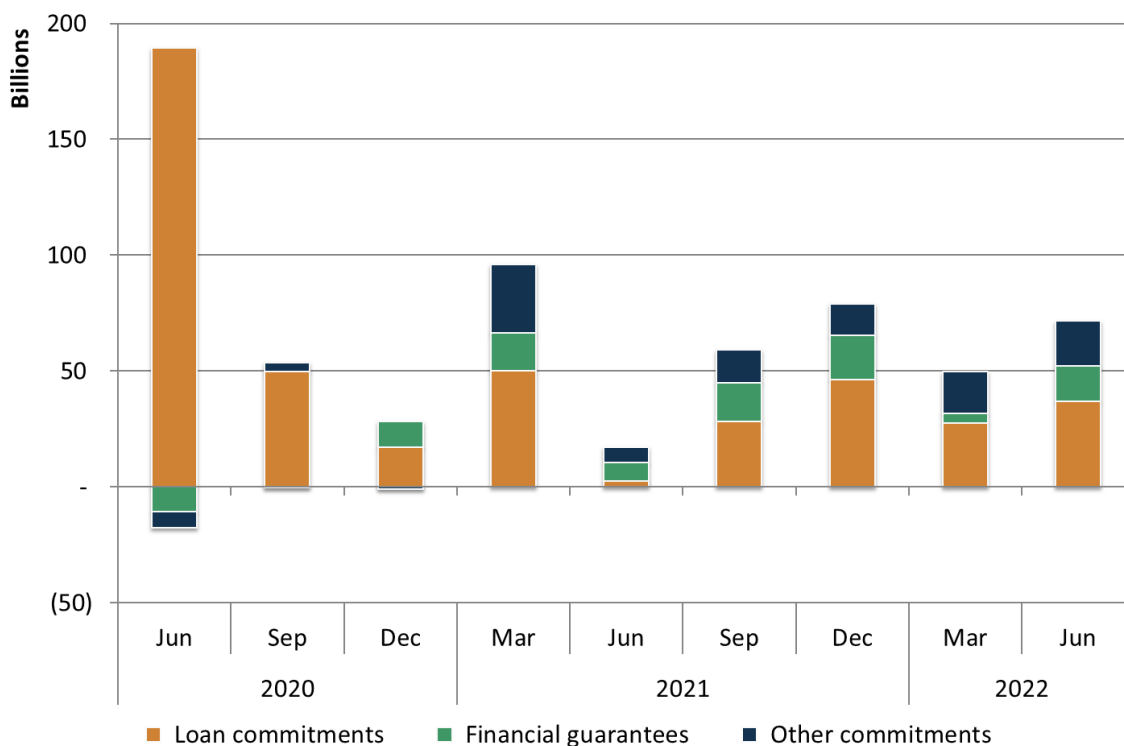
While asset quality has improved markedly across all sectors in the post-pandemic period (since June 2021), non-performing loans towards electricity, gas and steam companies have increased by 6% YoY (preliminary data for Q2 2022), also increasing accumulated impairments by 5%. Still, the NPL ratio for this sector (1.4%) is below the average non-performing loan (NPL) ratio for non-financial corporates (3.6%).

Outstanding loans and advances to other energy intensive sectors (albeit quite broad in definition) are quite significant for the EU banking sector. This represents more than EUR 3.5tn of loans and advances towards sectors such as, Manufacturing (EUR 1tn), Transport and storage (0.4tn), construction (EUR 0.3tn). These sectors are followed by smaller exposures towards agricultural (EUR 0.2tn) and mining and quarrying (EUR 0.1tn). These exposures form more than 35% of the banks' total exposures towards non-financial companies.

### EU banks off-balance sheet items

Loans and other commitments and financial guarantees towards non-financial corporates have increased markedly since the beginning of the year. In fact, since the beginning of the year EU banks reported an increase in off-balance sheet items towards NFCs (e.g. loan commitments and financial guarantees) of more than EUR 120bn. Supervisory reporting data does not provide granular information on off-balance sheet exposures by sector.

Figure 10: Quarterly change in outstanding volumes of off-balance sheet items of EU banks towards non-financial corporates



Source: EBA Supervisory data

### EU banks' exposures towards Central Counterparties clearing commodity derivatives

Concerning exposures towards CCPs<sup>13</sup>, which include commodity derivatives among instruments cleared, as of June 2022, the total amount of original large exposures reported is EUR 88bn. It registered a sharp increase (+78%) since December 2021, with a peak in March (+98%). These figures are mainly contributed by institutions in Belgium, Spain, France, Italy and Sweden. However, after the application of exemptions and of the CRM framework, the large exposure amount decreases to around EUR 3bn, mainly contributed by Spain and France. CCPs are also among the top derivative counterparties for institutions. The reported amount of exposure value towards commodity CCPs listed among the top 20 counterparties COREP template is EUR 129bn (+15% since December 2021). This amount is mainly contributed by institutions in Belgium (+74%), Germany (+42%), Denmark (+15%), Spain (+34%), France (-9%), Ireland (+29%), Italy (-32%), The Netherlands (+110%) and Sweden (+24%).

<sup>13</sup> The CCPs analysed are: Eurex Clearing AG, CASSA DI COMPENSAZIONE E GARANZIA SPA, LCH S.A., European Commodity Clearing AG, Nasdaq Clearing AB, KELER KSZF ZRT., BME CLEARING SA, ATHEXCLEAR, LCH Limited, CME GROUP INC., LME CLEAR LIMITED, ICE Clear Europe Limited.

## Annex B: Credit risk framework

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Credit lines and bank guarantees' exposure values depend on the application of certain percentage based on the risk profile, either through credit conversion factors (A-IRB and F-IRB) or through the risk classification buckets as set out in Annex I of the CRR (F-IRB and SA).

Given the relatively large exposures involved in margin requirements under the current energy situation, it could be argued that the credit institutions involved in the intermediation of collateral would tend to be the largest and hence hold approval for the determination of capital requirements through IRB models. However, there could be instances where this could be provided by smaller, albeit specialised institutions, hence the prudential treatment for credit risk under the SA is also presented for completeness.

Table 1 below establishes a comparison of the supervisory prescribed factors under the SA and the F-IRB, where it can be observed that the most favourable capital requirements attainable for institutions in the provision of collateral for corporates would be the issuance of credit lines, as bank guarantees would be equivalent to outright loans. For maturities up to one year, revocable credit lines are still attracting a relatively lower cost of capital compared to irrevocable credit lines and bank guarantees.

Table 1: Relative cost of regulatory capital for off-balance sheet instruments that could fund margins

Supervisory prescribed adjustments to exposure values. A higher percentage denotes higher regulatory capital

EXPOSURE TYPE	SA	F-IRB
<b>Credit lines committed but undrawn:</b>		
• Revocable	0%	0%
• Irrevocable:		
○ Original maturity up to 1Y <sup>1</sup>	25%	75% <sup>2</sup>
○ Original maturity over 1Y	50%	
<b>Bank guarantees:</b>		
• Guarantees having the character of credit substitutes	100%	100%
• Irrevocable long-term letters of credit	100%	100%

Notes: <sup>1</sup> CRR Annex I 2(b)(ii).<sup>2</sup> CRR Article 166(8)(d).<sup>3</sup> Bank guarantees can also take the form of short-term letters of credit from the movement of good. These are not presented in the table as of relevance for the funding of margins, given there is no movement of goods.

Source: Article 111, Article 166 and Annex I of the Capital Requirements Regulation.

## Annex C: Public guarantees already provided

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Several governments have already provided public guarantees to ensure that energy producers and suppliers would be able to margin calls. Below is a non-exhaustive list of public measures already in place in some Member States:

- Germany<sup>14</sup> has started providing financial resources in the form of credit lines from KfW, covered by a federal guarantee, to assist with liquidity for margins on futures markets for electricity, natural gas and emission allowances. Loan agreements can be signed until 31 December 2022. This measure targets companies headquartered (or with branches) in Germany, for their liquidity needs arising from hedging futures on electricity, natural gas and emission allowances traded at EEX and ICE Endex or cleared at ECC and ICE Clear Europe.
- Sweden<sup>15</sup> has set up a guarantee framework, amounting to SEK 250 bn, to cover 80 per cent of new loans granted by banks to energy firms. Guarantees can be granted until 31 March 2023, and the total maturity may not exceed three years. Electricity producers that are not domiciled in Sweden, but that are clearing members or clearing clients of clearing members of Nasdaq Clearing AB, may be granted guarantees until an equivalent form of liquidity support is established in their countries. Importantly, Nasdaq Clearing has modified their internal exposure and liquidity limits so that that the government guarantees will be matched by higher internal limits from the CCP towards direct clearing members and general clearing members participating in the guarantee program. Due to recent declines in energy prices, partly due to the market stabilising in response to the guarantee, banks still have to ask for guarantees.
- Finland<sup>16</sup> implemented a central government scheme amounting to € 10 bn, as a last-resort financing option for companies that would otherwise be at risk of insolvency. The government may grant loans to key companies in Finland operating in the electricity derivatives market to cover liquidity needs caused by increased collateral requirements.

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<sup>14</sup> [https://www.kfw.de/About-KfW/Newsroom/Latest-News/Pressemitteilungen-Details\\_715136.html](https://www.kfw.de/About-KfW/Newsroom/Latest-News/Pressemitteilungen-Details_715136.html)

<sup>15</sup> <https://www.riksdagen.se/en/our-operations/guarantee-and-lending/state-credit-guarantees-for-electricity-producers/>

<sup>16</sup> <https://valtioneuvosto.fi/en/-/10623/supplementary-budget-proposal-to-secure-the-effective-functioning-of-the-electricity-market>