

Methodological note

GUIDANCE NOTE ON THE RECORDING OF REVERSIBLE CAPS ON ENERGY PRICES WITH FINAL COMPENSATION

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I. Introduction

1. Amongst the numerous measures undertaken by Member States in order to mitigate the impact of the sharp increase in energy prices on households and/or corporations, some Member States have introduced (or envisaged to introduce) new ‘reversible cap schemes’ on energy prices.
2. In such ‘reversible cap schemes’, energy suppliers are either obliged by an *ad hoc* law to charge a price fixed by government or at least to contain the increase (e.g. normally due by contract or by regulation). The full price increase is thus not passed to the consumers in a first period, with the reverse happening in a subsequent period (assuming that energy prices have sufficiently decreased in the meantime), i.e., in the subsequent period, suppliers have to charge higher prices than normal. Government then commits to pay any remaining difference.
3. This note aims at presenting (in section III) the applicable national accounts recording of such (potentially large) price cap schemes that are ‘reversible’ in nature and ‘compensated’, aside from two variants with no final compensation, and at presenting (in section IV) the underlying analysis underpinning these rules.

II. Description of ‘reversible cap schemes’

4. Fixing or regulating prices is not an exceptional phenomenon and this can often be observed for example in the rental housing market¹, in the retail of pharmaceutical products, or frequently in the energy market itself. Such regulation usually applies to all suppliers, private or public, with no associated compensation provided by governments. This type of general price regulation requires no specific treatment for national accounts purposes and is not within the scope of this guidance note.
5. On the contrary, the type of ‘reversible cap scheme’ introduced in the context of the energy crisis is radically different from these general regulated prices and deserves specific attention. This guidance focuses on such caps that do not stem from general regulation but have some of the following features:

¹ Meaning not just for social housing, but to the whole rental market of, for instance, one specific area.

- a. The cap implies a selling price below the cost of supplying the energy, thus causing (significant) losses to the suppliers (which may either be distributors or producers).
 - b. The cap applies to contractual prices, that is to say: to already agreed prices between the suppliers and the customers (often themselves regulated).
 - c. The cap scheme foresees a subsequent period where the prices are set above the contractual price so to compensate the lower price charged in the first period.
 - d. The suppliers receive eventually a final compensation for the remaining losses incurred because of the implementation of the cap if the excess proceeds of the second period are not enough.
6. Typically, these caps on energy prices work in the following way: during a first period, corresponding to the time where the inflation (higher prices) is foreseen to last, suppliers are required to sell energy at a price fixed by government, below the price they would otherwise charge according to the contracts they have with their customers. After this first period, assuming energy prices have returned to normal/lower level, suppliers are required to compensate some or all of the losses incurred because of the price caps (loss in earnings), by charging prices above the contractual prices during a limited period of time (period 2). In case the higher prices of the second period are not enough for neutralising the reduction of earnings of the first period, government provides a compensation for the difference (period 3).
7. Some variations can be observed. In one variant, government chooses not to compensate a public supplier in period 3 for the net losses incurred by the scheme, but compensates the other producers. Another variant is when the second period has no predefined end date. Suppliers will charge higher prices than the contractual ones until they fully compensate the losses incurred by the scheme in period 1. In this second variant, government will not necessarily need to compensate suppliers.

III. Recording in national accounts

1) Recording in national accounts of the main case of reversible cap scheme

8. In a typical reversible cap scheme, the overall loss/gain of the suppliers due to the cap is at the end of the scheme nil, by design, since the loss generated by the scheme in period 1 is offset either by a gain in period 2 and/or by a final compensation (see box 1 for a simple mathematical presentation). Government is guaranteeing and (through a compensation or through additional levies imposed by government on consumers) *de facto* funding the whole scheme, unconditionally.
9. During the first period, the recording in national accounts is the following:
- a. Household consumption expenditure² equals what they actually pay during the period, i.e., the energy volume times the price fixed by government.
 - b. In contrast, the output of suppliers must be valued at basic price, which is the price they will eventually get for each unit sold. Due to the government commitment to pay for the difference between the fixed price and the contractual price, the basic price remains the contractual price.
 - c. The (positive) difference between output and household consumption expenditure is a subsidy on products (D.31) expenditure of government. The counterpart of the expenditure is an entry in other accounts payable (F.89) toward non-financial corporations.

² Or (corporate) purchases (intermediate consumption, or changes in inventories) in case the reversible tax scheme also benefits non-financial corporations (notably SMEs) or units from other sectors such as NPISH.

10. The second period is symmetrical to the first:

- a. Household consumption expenditure again equals what is actually paid by them during the period.
- b. The output of the suppliers must again be valued at the contractual price, which is what they eventually actually get for their production.
- c. The (negative) difference between output and household consumption expenditure is a tax on products (D.214a) received by government, which lowers the final compensation that government will have to pay out to suppliers. The financial transaction counterpart of the tax received by government is a decrease in the other accounts payable that was incurred during the first period.

11. The third period is when the final compensation takes place, usually a one-off event, where government observes the net losses incurred due to the cap over the two first periods and compensates the supplier accordingly.³ The settlement can occur at a point of time, or be spread over time, or can even take the form of a tax credit. This closing transaction has no impact on the deficit (net lending / net borrowing) of the government (often the State / budgetary central government) and simply corresponds to the repayment/settlement by the government of its remaining liability towards energy suppliers it has at the end of the period 2, due to the cap.

2) Recording when some public sector suppliers receive no final compensation, while the others do

12. A variant of the main case described above is when one (or a few) public supplier eventually receives no additional compensation besides the catch-up period 2, while the other suppliers do. As the economic substance is the same, the non-financial recordings are identical with the same impact on B.9 in each period 1 and 2.

13. The closure of the scheme for the public sector suppliers not compensated is, however, different: in period 3, whereas others (e.g., private sector suppliers) are compensated (receiving cash (F.2) or equivalent) for the remaining claim they have on government (AF.89), the public suppliers receive nothing, meaning that the latter have financed part of the measure through their own funds. In this latter case, the remaining claim on government (AF.89) is redeemed through a withdrawal of equity (F.5).

14. A possible alternative recording in the financial accounts is to record a withdrawal of equity (F.5) in period 1 (instead of a payable) as counterpart transaction of the subsidy, followed by a capital injection (F.5) in period 2 (instead of a redemption of payable) as counterpart of the tax, and no transaction in the third period. However, the capital injection in period 2 would have to be capital injection tested.

³ A situation where the amount due becomes negative, although unlikely to happen, is theoretically possible. It would mean that the implied tax revenue of period 2 would more than compensate the subsidy expenditure of period 1. In this situation, the treatment would depend on what government decides (i.e., to actually claim the surplus or not) and when (within one year after the second period, or much later in time).

When the suppliers are required to reimburse government for the overpayment, that repayment would, coherently with the treatment of a positive compensation, be recorded as a repayment of a liability owed by suppliers to government (i.e., of tax receivable of the government, which appeared after the initial payable was fully redeemed), with no impact on the government deficit. Indeed, the repayment would simply materialise the fact that the suppliers have collected a tax on behalf of government.

When the suppliers are not required to repay government for the surplus of the tax over the subsidy, the treatment would depend on when the decision is taken: i/ if the decision to waive the claim is taken within a year after the end of the second period, the proper treatment is to stop recording the tax in period 2 when it reached the level of the subsidy of period 1. The excess charged to customers would then not be recorded as tax on products, but as sales in the account of the suppliers. ii/ if the decision is taken more than one year after the end of the second period, the transaction is a case of 'debt cancellation', and a capital transfer from government towards the suppliers must be recorded for the tax in excess of the subsidy, at the time the claim is waived, redeeming the corporation's payable.

15. The main case and the case without final compensation thus merely differ in the financial accounts recording, reflecting differences in the financing of the measure, with entries in F.5 for the case without final compensation (either in the third period or alternatively in periods 1 and 2).
16. It is not likely that this case without final compensation would be applicable as such to private suppliers, as they would presumably seek legal remedies. However, there may be private minority shareholders in the public corporation, which may raise further issues that would need to be addressed (these minority shareholders may also seek legal remedies, judging that government is financing a subsidy programme partly at their cost).

3) Recording when the second period has no defined end date

17. Another variant of reversible cap schemes is where the second period has no defined end date and would stop only when the losses incurred in the first period are offset by the high price charged subsequently.
18. This situation is in fact rather similar to the one where the corporation is public and not compensated in period 3. It is similar to the extent that there is a likelihood that the corporation will not be fully compensated, and at the same time different to the extent that the ultimate loss will likely be much reduced in this case where period 2 has no defined end date.
19. If the corporation is private, it is unlikely that no compensation is foreseen at inception, otherwise the private producer would simply stop supplying as soon as it can.
20. The treatment proposed above for period 1 and 2 fully applies when the period 2 is not limited in time, with no particular difficulty, providing that the contractual price, which serves as reference, is well observed over time.⁴

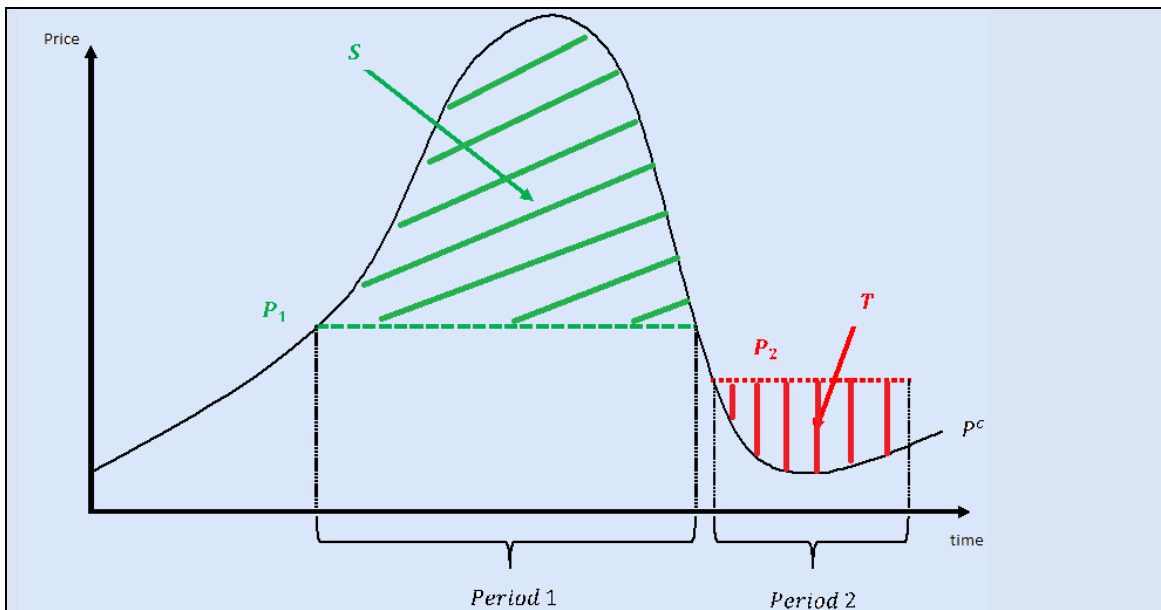
Box 1: Main case (reversible cap scheme with a final compensation) presented with mathematical notations

As explained in the note, three periods must be distinguished when describing the recording of the main case of reversible energy price caps with a final compensation: Period 1 is when the cap implies prices actually charged to consumers below the price that should normally be charged according to the consumer contract ("contractual price"). Period 2 corresponds to a catch-up period, where the prices charged are higher than the contractual prices. A final compensation is paid out by government after periods 1 and 2, to ensure the scheme is financially neutral for energy suppliers.

For a period t , let us denote Q_t, P_t, P_t^c , respectively as, the quantity of energy sold, the price fixed by government, and the contractual price that would have been charged by the supplier if no measure were enforced. The scheme is *a priori* designed for cases where inflation is temporary, such that prices, after a first period of sharp increase, go back below or close to their level observed prior the crisis. If the prices never sufficiently go down, the period 2 *de facto* disappears. Considering the above, the design of the scheme implies that $P_1 < P_1^c, P_2 > P_2^c$.

During period 1, the loss of earnings incurred by the suppliers compared to the contract is equal to $S = Q_1 * (P_1^c - P_1)$, while during period 2, the same suppliers generate a surplus compared to the contract equal to $T = Q_2 * (P_2 - P_2^c)$. The scheme aims at smoothing the price charged to consumers over time, as illustrated by the graph below.

⁴ Consistently with footnote 3, the tax recording of the second period stops when the subsidy of the first period is fully recovered, and, as a result, the basic price is thereafter increased.



Assuming that the catch-up is not enough for compensating the losses of the first period, government agrees (main **case**) to compensate suppliers with a cash payment C for the remaining net losses over the two periods:

$$C = Q_1 * (P_1^c - P_1) - Q_2 * (P_2 - P_2^c) = S - T$$

The overall loss/gain of the suppliers by the end of the scheme is by design nil, since the loss (generated by the scheme) in period 1 (S) is compensated either by a surplus in period 2 (T) and, if not enough, by a final compensation (C).

During the first period, the treatment in national account is the following:

- Household consumption expenditure equals to $Q_1 * P_1$.
- The output of the suppliers must be valued as $Q_1 * P_1^c$, corresponding to the amount they will eventually get for their production.
- The difference between the output and the household consumption expenditure is a subsidy on products (D.31) expenditure of government, equal to $S = Q_1 * (P_1^c - P_1)$. The counterpart of the expenditure is an other accounts, payable (F.89) of government toward non-financial corporations.

The second period is symmetrical to the first:

- Household consumption expenditure equals to $Q_2 * P_2$,
- The output of the suppliers must be valued as $Q_2 * P_2^c$,
- The difference between output and the household consumption expenditure is a tax on products (D.214a) received by government, equal to $T = Q_2 * (P_2 - P_2^c)$, which lowers the final compensation that government will have to pay out to supplier. The financial transaction counterpart of the tax received by government is a decrease in the other accounts payable of government that was incurred during the first period.

The last step is the compensation, occurring in period 3. This is usually a one-off event where government observes the net losses ($S - T$) and compensates the supplier accordingly. This closing transaction has no impact on the deficit and simply corresponds to the repayment by the government of its remaining liability towards energy suppliers it has at the end of the period 2.

Table: transactions to be recorded in General Government account for the main case with

final compensation			
	Period 1 (cap)	Period 2 (catch-up)	Period 3 (compensation)
Non-financial account			
Subsidy on products (D.31)	$S = Q_1 * (P_1^c - P_1)$		
Tax on products (D.21)		$T = Q_2 * (P_2 - P_2^c)$	
B.9	-S	+T	0
Financial account			
Cash (F.2) asset			$T-S = -C$
Other account (F.89) liability	+S	-T	$T-S$

IV. Statistical analysis

1) Main case of reversible cap schemes

21. One important feature of these schemes is the overall neutrality for suppliers, as government commits at inception to compensate fully, one way or another, for the losses of the first period due to the cap. Suppliers have therefore the guarantee that they will eventually manage to recuperate the contractual price initially agreed upon with their customers.
22. During the first period, thus, government *de facto* lowers the 'purchase price' (i.e., the amount paid by purchasers/consumers), while not changing the 'basic price' of the supplier (i.e., the amount earned by producers). Assuming all similar consumers benefit from the lower tariff, the difference between the basic price and the purchase price fulfils the definition of a subsidy on products (ESA paragraph 4.33)⁵, which justifies in period 1 the recording of a government expenditure, specified as the "*difference between a specified target price and the market price paid by the buyer*" (ESA 2010 paragraph 4.33c).
23. The second period is symmetrical to the first. As the excess price charged impacts the purchase price while having no impact on the basic price, in addition of being compulsory and unrequited, it can be seen as a tax on products.
24. Indeed, the transaction in the second period is compulsory and unrequited since, under normal circumstances, consumers would have had the same amount of goods for a lower price (the contractual one). Moreover, the higher price charged to the consumer does not benefit the corporations that receive the cash: the difference/excess in price does not result in an increase of the profits of the supplier, but only in a decrease of the final compensation government committed to provide. Finally, government decides alone on the extra amount charged to the final customers, not the supplier. In this respect, this excess in price is not of the same nature as the (contractual) price itself, being not influenced by supply and demand: that is why it is not price, but tax.
25. One alternative to the recording of a subsidy in period 1 and a tax in period 2 would be to follow a netting approach, closer to the observed circulation of cash. This recording would (for instance) lead to record no transaction in government account during the two first periods, and to record only the final compensation as a government expenditure in the third period. The total B.9 impact (over the 3 periods) would be the same compared to the recording advocated in this guidance note, but the B.9 in each period would not.
26. To justify such a recording of a government expenditure only in period 3, one possible argumentation would be that, through the cap scheme, government merely regulates the prices during the two periods, and sort of provides the supplier with a 'price guarantee', which would then be 'called' in period 3 (if net losses occur). This argument may seem appealing in the case

⁵ If not all consumers benefit from the scheme but, say, only some households, the transaction could have the nature of a social transfer in kind rather than a subsidy, but this does not change the B.9 impact, total expenditure and revenue of government, or the time of recording.

where the supplier price is regulated in the first place (notably for households), given that one may consider that the cap is a mere modality of price regulation.

27. This view is however not satisfactory for a number of reasons. Regulated prices are usually established for limiting profits under the constraint that production costs are still covered (i.e., producers are neither making high profits nor losses). Thus, no compensation is necessary when prices are simply regulated, the policy being normally designed such that the supplier still has an interest in producing the good or service upon regulation. In contrast, the recently observed caps aim at intentionally imposing the suppliers (seemingly) large losses in the first period and large profits in the second period (assuming basic prices consistent with this alternative recording). Thus, the cap cannot be so easily assimilated to a simple modality of price regulation. Also, while regulated prices are often calculated by an independent regulator based on cost considerations, the cap will be imposed by government for economic policy reasons, thus often following completely different decision processes, arguably reflecting a difference in nature.
28. When it comes to reversible cap schemes, the incentive for producing/supplying (energy) is fully maintained in the first period, even where the fixed price is not high enough, thanks to the promised final cash compensation. In such a scheme, the price is in fact not fixed for the purpose of covering the production costs, but solely looking at the customer side.
29. Another drawback of the alternative recording is that it distorts significantly the recording of the output of suppliers during the lifetime of the scheme, and consequently the net operating surplus and the margin rates of the concerned branches (distribution of electricity, gas, and so on). Ignoring the subsidy during the first period would often lead to large negative net operating surplus in that period that would be difficult to justify from an economic point of view. In fact, it may give the impression to data users that energy suppliers are taking the initiative and responsibility of mitigating the impact of the energy crisis, while this is clearly government action, which is moreover made explicit by the final compensation it grants.
30. It should also be noted that the accounting profit of the suppliers in their own financial statements is likely to record the sale at the contract/regulated price and not at the capped price, i.e. reflecting the subsidy component (showing what is sometimes called 'regulatory receivable'), the accountant anticipating the liquidation of the receivable in either period 2 or 3. This would be an additional argument for the proposed recording in national accounts (being aligned with business accounting), with little reason to deviate in national accounts from the value added exhibited in business accounting.
31. Finally, a severe problem would concern the recording of the final compensation in period 3. Recording a subsidy (D.3) in period 3 would run against the accrual principle (as well as against the national accounts rules that generally prohibit netting). Recording alternatively a call for the activation of a one-off price guarantee implies recording a capital transfer (D.99) from government to the supplier, which seems not fully appropriate from an economic perspective. The final cash payment is linked to the volume of energy produced (during period 1 and 2) and intends to compensate the suppliers for charging low prices, and should thus enter the basic price: it has the nature of a subsidy, not of a capital transfer. Recording a capital transfer would permanently underestimate the output cumulated over the two periods and thus the gross operating surplus, which would not be very satisfactory from an economic point of view.
32. It is recalled that ESA paragraph 1.110 clearly advocates for gross recording and generally prohibits net recording, particularly between/across economic categories. In the situation described, the payment *de facto* uncovers two transactions (a subsidy and a tax) that are well identified and thus should not be netted.
33. A net recording would not permit respecting the correct time of recording of the transactions. The subsidy, as well as the tax components, accrue at the time of the production/sale of energy, which only a gross recording can ensure. Conversely, the net recording approach would lead to record one single transaction long after the production takes place. The final compensation may not even be given quickly after the scheme ends, but one or two years later, possibly depending

on the supplier, regardless of the fact that the liability towards the suppliers is recognised and updated on a continuous basis.

34. The proposed recording (a subsidy and a tax) has also the clear advantage of being consistent with the national accounts rules of simple compensated cap schemes, with no reversible period, that is: with a period 1 and a payment in period 3. In such a case, in application of the accrual principle, a subsidy on product is applicable in period 1 and the payment in period 3 is a financial transaction. This case looks simply like case 1 with a very small or negligible period 2. It would appear strange that the mere existence of a second period should prevent a sound recording in period 1, and could even create recording anomalies if, due to market circumstances (e.g., the energy prices remaining high), the period 1 was to be significantly extended and/or the period 2 shortened or even eliminated.
35. The observation of the subsidy and then of the tax components of the selling price is generally achieved without difficulty in this main case because the producer will recognise a receivable in period 1 and a decrease in receivable in period 2, with a final reconciliation in the third period via the recognition by government of a payable (and its settlement in one go or over time).
36. In this respect, it is not the case that a cash recording would be noticeably simpler and that macroeconomic data would in the end be more homogeneously reported as a result. The proposed approach is only marginally more demanding than a cash approach, whereas a cash recording would imply very heterogeneous B.9 impacts across Member States (possibly postponed to the distant future in some cases), depending on the extent of periods 1 and 2, as well as on the paying modalities in period 3.

2) Public supplier not compensated for the net losses

37. Energy markets are highly regulated and government plays a significant role in their design. It is also common that a public corporation is a significant player in the market, if not in a monopoly situation.⁶ In this context, it is possible that government instructs these public corporations to execute the scheme without providing any final compensation, while compensating the existing private suppliers.
38. The fact that the scheme is unfunded for one (or a few) public corporations is not a reason for changing the recording. This is particularly straightforward when private suppliers benefit from a compensation, but, at the same time, public suppliers do not. The fact that government arrangements with public corporations are different from arrangements with private corporations is an indication that the public corporation is executing government economic and social policies (see ESA 2010 paragraph 20.204) rather than acting as a market producer.
39. If we consider the point of view of the beneficiaries of the scheme, i.e., the final consumers of energy, it is clear that being a customer of a private or a public supplier makes no difference: the purchasing price is, in both cases, lower than the contractual terms in the first period, and higher in the second. As a consequence, the final consumers benefit from a lower price in period 1 but pay a higher one in period 2, regardless the public or private statute of the provider, and regardless the supplier is compensated or not.
40. From the point of view of government, the difference between providing a compensation or not (to a public supplier) is merely a financing issue. After the tax is levied and used for partly financing the subsidy, government uses cash assets when compensating (private) suppliers, and equity assets otherwise when not compensating public suppliers. Being a mere financing issue, no difference should be made in the non-financial accounts, i.e., when not compensating a public producer, government actually finances the operation by reducing its equity. It should be noted that the own funds of the public corporation fall because of the uncompensated cap, thus implying

⁶ Typically, in relation to the ownership and operation of the network transmission systems. In certain cases, however, this is also the case for the power generation and distribution segments.

a reduction in the equity held by government, and it appears appropriate that this latter reduction is reported as a transaction rather than as a revaluation.

41. An alternative recording in the financial accounts would be to use equity as counterpart in the two periods: withdrawal in the first period, and injection in the second period (and not solely a net withdrawal at time of final compensation). This would seemingly be in line, especially in period 1, with the MGDD accounting example 3 (2022 MGDD section 1.2.4.5.6), where a public corporation is granting a subsidy with no reimbursement by government. The tax collected in period 2 would then be deemed reinvested in the corporation through F.5, and finally nothing would be recorded in period 3. This F.5 approach may be more relevant when the period 2 is expected or turns out to be fairly short or insignificant, such that the decapitalisation of the public producer may usefully be shown in period 1, rather than in period 3.
42. The capital injection in period 2 would however have to be 'capital injection tested', in principle – which is only relevant in case the company has been making losses in period 1 and/or 2 even after considering the imputed subsidy. This capital injection testing will not result in double counting government expenditure. When the imputed subsidy will ensure that the corporation makes a profit (statistically), the capital injection test will be passed and the injection will then be recorded as F.5. However, when the company will make a large (statistical) loss⁷ in period 1 (or/and period 2) even after imputing the subsidy, the capital injection test will fail, and it is justified that the injection is recorded (in whole or in part) as a capital transfer, because the capital injection takes place in a corporation that makes losses over two years, even after accounting for the imputed subsidy.
43. The counter-argument that the capital injection of period 2 is designed to cover the decapitalisation of period 1, so to justify no capital injection test in period 2, is not admissible, because a capital injection generally cannot be assigned to cover a dedicated spending (ESA 2010 paragraph 20.198b: "*the corporation must enjoy a large degree of freedom in how it uses the funds provided*"). Linking period 2 with period 1 is the precise function of the preferred F.89 recording: with this alternative recording, the tax event moment is designed to cover the subsidy event, via decreases/increases (respectively) in payables.
44. Thus, there would seem little rationale to avoid the capital injection test in period 2, in the F.5 approach, that is: if the analysis is indeed that the tax is returned to the public producer concerned through a capital injection. This F.5 approach has then the significant inconvenience of possibly leading to a different cumulated B.9 impact compared to the preferred payable (F.89) approach.
45. The alternative F.5 recording is not without further problems. First, the MGDD only describes a simpler case than the one under review in this guidance, corresponding to a one period case, where only a subsidy is granted (thus a scheme with no period 2 should indeed be recorded with an F.5 in period 1). Second, by using the F.5 counterpart in all periods, we would lose an important aspect of the treatment, that is the parallel between the two cases (with or without compensation), in periods 1 and 2. Until period 3, there seems to be in fact no difference between the two situations. Indeed, what is funded when a compensation is given is not the full subsidy, but the difference between a subsidy and a tax. Therefore, in the situation where government is not refunding the corporation, the MGDD provisions should apply to the part that is, in practice, not refunded: the final compensation. Only this last compensation is thus intended to be withdrawn from the public corporation.
46. Finally, the fact that there is no explicit cash compensation initially foreseen for some public suppliers (simply because no official commitment is required since the corporations are publicly controlled) at the time the scheme is set up, does not mean that no compensation will be decided later on, possibly before the end of the scheme. This may happen for instance if the period 1 lasts longer than expected, thus implying important losses. The asymmetry between the private suppliers and the public one is only certain in period 3, when and if it is observed that the public

⁷ Statistical profit/loss can be measured by net entrepreneurial income (B.4) or net disposable income (B.6) or net change in net worth due to savings and capital transfers (B.101).

corporation is indeed not eventually compensated in cash. This alone seems to justify keeping the same recording in the main case and the case without final compensation, for the two first periods, and making a difference in recording, if needed, only in period 3.

47. These arguments would actually also hold when only public corporations enforce the scheme with no compensation from government, for consistency reasons, and also because there is initially a contractual agreement between those public corporations and their customers, which is being broken unilaterally by government for policy reasons. The public suppliers of energy are therefore compelled to enter into non-commercial transactions where government determines almost all terms and conditions (see for instance MGDD 1.2.4.5.1. §86-88 on atypical or non-commercial transactions, or MGDD 1.2.4.5.2. §109 b). Fixing the price of the main product sold by a corporation, implying a loss, seems a sufficient condition for rearranging a transaction (notably following MGDD 1.2.4.5.2. §106 and 1.2.4.5.4. §119-121).
48. The fact that government does not actually settle in cash its obligation does not prevent recording an other accounts payable (AF.89), even though such instruments are generally defined as arising from the gap between the recording of a nonfinancial transaction and its cash settlement, given that settlements can also be effected by other means than cash.
49. One example of payable recorded while no cash transaction is made concerns the cases of rerouting. This is notably the case of renewable energy subsidy-tax schemes that are the object of the analysis in box 2. The proposed recording of reversible but uncompensated cap schemes is consistent with the prescription to recognize all renewable subsidy and tax schemes in government accounts, irrespective of how they are designed, as long as their economic effects are in substance similar.

Box 2 - Measures in support of RES-E

Description of the case

Member States implement various measures supporting the production of electricity from renewable energy sources (RES-E). The costs of these supporting measures are typically borne either by electricity consumers via a surcharge in the electricity bill, by taxpayers via government budgets, or a combination of both.

Various arrangements in terms of support provided to RES-E producers are typically observed, either price-based, such as 'feed-in' systems, or quantity-based, such as quota systems. Other complementary mechanisms (not discussed here) are also possible, e.g., direct investment subsidies and tax incentives. Feed-in-systems encompass two types of contracts: 'feed-in-tariffs' (FIT, which guarantee a price per MWh of renewable electricity produced) or 'feed-in-premiums' (FIP, which provides a premium on top of the energy market price).

In a quota system (e.g., tradable green certificate systems), renewable energy is sold at the market price and this income is complemented by the sale of certificates by the producers entitled to do so based on their volume of RES-E production. Certificates are typically bought by electricity suppliers or big consumers, who must acquire up to a certain amount (percentage) of their total electricity production or consumption, set by government, or may be bought by other interested parties. Certificates can be bought directly from the RES-E producers or on the market.

Separately, the implementation of these supporting measures can take place either directly through the State (budgetary central government), or through a unit within S.13, or alternatively via public or private corporations.

Recording

When the support is actually paid out by the State budget or by another S.13 unit, the accounting presentation of the transaction is generally straightforward, although netting considerations as well as the appropriate time of recording must be carefully analysed.

RES-E supporting measures transiting through government budgets or assimilated entities classified in government may take the form of net payments (subsidy minus 'surcharges'). In this case, the

subsidy and the surcharges (taxes) should be explicitly shown in S.13 accounts, as ESA 2010 generally forbids netting and as netting leads to inconsistencies regarding the time of recording as well as counterparties. Grossing also ensures the harmonisation of government total revenue, total expenditure and tax burden across Member States.

When the supporting measures are implemented by a corporation, there are similarities with the reversible cap schemes described in this guidance note, in so far as the implementing corporation is required by government, following the specific regulation, to pay to the producers of RES-E an amount that is higher than the prevailing market price. In exchange, the implementing corporation is allowed to increase its selling price, thus recouping its additional costs from final consumers of electricity. These transactions taking place in a typical RES-E support scheme could then be seen as similar to those occurring in periods 1 and 2 of a 'reversible cap scheme', although, in the case of RES-E, the subsidy and the tax components often take place within the same period.

The appropriate accounting presentation of government interventions in support of RES-E follows the same criteria than those presented for periods 1 and 2 of a reversible cap scheme. In particular, the RES-E supporting measures result *de facto* in the redistribution of income and wealth, which requires rerouting when implemented by a corporation not classified in S.13 (see MGDD 1.2.4.5.4, ESA 2010 paragraph 20.204). Consequently, it is appropriate to re-arrange them in order to bring out the underlying economic relationships more clearly (ESA 2010 paragraph 1.72). Rearranging is also appropriate so to treat schemes identically across Member States, irrespective of whether the implementation body is classified inside or outside government.

In terms of expenditure/revenue classification, RES-E support measures that aim to promote a specific production function of the producer, are to be accounted for as other subsidies on production (D.39), on the basis that it is a specific production process that is intended to be subsidised, despite the fact that the support is often linked to the volume of the RES-E producer's realised output (MWh). In practice, RES-E producers are fixed-quantity suppliers (depending on sun or wind) such that they actually increase supply through higher investment, and not through varying their utilisation rates in response to higher prices. In this context, it seems preferable that the basic price is set equal to the purchase price, while the higher net operating surplus stemming from the subsidy on production incentivises investment. Moreover, the product (electricity) of renewable energy producers is the same as – and fungible with – the product produced by other producers (also electricity).

The surcharge to the electricity bill paid by the final consumers would be recorded (and, in case of need, re-routed) as taxes on products except VAT D.214, as the surcharge is typically billed to all consumers and the surcharge is generally proportional to consumed volumes.

In 'contracts for differences' (a type of FIT scheme), RES-E producers may have to pay government/the implementing unit, rather than receive from them, a 'difference' (e.g., when the market price of electricity is higher than the price guaranteed by government to the RES-E producer). Such payments by producers are to be recorded as tax on production (D.29) revenue of government, rather than as negative subsidy/expenditure of government, although flexibility may be acceptable in some specific circumstances (for instance, when monthly or quarterly payments to and from government alternate within a year).

The subsidy to RES-E producers accrues when the electricity is generated from the renewable sources, since ESA 2010 §4.39 defines the time of recording of subsidies (D.3) as when the transaction or the event (production, sale, import, etc.) that gives rise to the subsidy occurs. Similarly, the time of recording of taxes must focus on economic substance, i.e., when the economic activity that generates the tax liability takes place or, in the case of some income taxes, when the amount of tax due is determined. In practice, the issue is often straightforward, e.g., because electricity cannot be meaningfully stored and the adoption of the relevant law is generally done in advance of the implementation of the scheme.

While RES-E supporting schemes are designed to be balanced over the long run, they are rarely balanced in each accounting period, as costs associated to the measure to be reimbursed to the implementing/paying entity in a period (through levied surcharges or similar) are generally not repaid in full in the same period. The timing of subsidies and taxes then differs and the implementing

corporation records a AF.89 receivable towards government in case of 'scheme deficit' (or a payable, in case of 'scheme surplus'), an accounting treatment similar to that presented for the 'reversible cap schemes'.

A distinction must be made between a situation where government acknowledges the difference or commits to its payment in the future (main case) and another where government merely expects the market to change and reverse the situation (second case), so that the implementing unit (likely to be 100% public) is unsure if it will receive a full compensation in the future.

The acknowledgement of government (main case) may be explicit and observable (through the surcharge billed to final consumers) or implicit (when government, typically through the regulator, certifies that there is a difference between the subsidy paid to the RES-E producer and the top-up implicitly permitted to the bills to the final consumers). Both cases are assimilated insofar as the acknowledgement is legally enforceable. The recognition in the own financial statement of the implementing unit of a claim towards (liability against) government would constitute strong evidence that one is in this main case.

In this main case, it is clear that there should be a B.9 impact for government with a related financial entry recognising the government payable (or, more rarely, the receivable) towards the implementing unit. This reflects a tariff deficit (or surplus), as seen in some Member States, for instance created by a cap on the variations of regulated tariffs above a particular level. The payment/recovery of the estimated costs that were not included in the allowed revenue of that particular year is then delayed to the following years.

In the second case, the approach is to align the subsidy (if explicitly measured) and the tax components, by convention, on the rationale that the implementing units must have charged in its tariff what is necessary to recoup its costs.

Cases where a RES-E scheme has accumulated a 'surplus' and this surplus is used to grant relief to consumers entail a government expenditure (e.g. subsidy on product) against a reduction in the AF.89 receivable of government corresponding to the scheme 'surplus', spread over the period of consumption intended to be subsidised.

50. The AF.89 recording for reversible cap scheme without compensation would likely deviate from the business accounting recording, which, in the absence of receivable, would presumably record a large loss in period 1 and a large profit in period 2. Because the corporation presumably cannot record in its own accounts a turnover valued at the equivalent of the basic price in national accounts, due to the fact it will not be compensated, the price cap scheme presumably has a direct impact on the accounting profits. During the first period, the profit in accounting is likely reduced by the amount of the subsidy as compared to the counterfactual situation where no scheme is implemented. Conversely, the accounting profit of the second period is enhanced by the amount of the tax collected by the corporation.
51. Because of this business accounting recording, it could plausibly be argued that the total government B.9 impact is already captured in some cases, indirectly through the dividend policy of the corporation, such that a double counting on the B.9 impact may then be created.
52. Let us assume, in this context, that the corporation is able to distribute in each period a much larger dividend than the amounts of subsidy and tax identified. Let us also assume that the corporation distributes all its profit as dividend every year (but no more). Under these extreme assumptions, the actual dividend distributed in period 2 (based on the profit made in period 1) will be lowered (compared to without cap), while the dividend distributed in period 3 is increased (still compared to the situation where no scheme exists). As a result, the total impoverishment of government induced by the scheme is spontaneously reflected in the account through the impact of dividends. The proposed recording may then be seen as leading somehow to a double B.9 impact on government account over the (three) periods.
53. Mitigating observations must be however made. Firstly, the assumptions are extreme and dividends generally constitute only a part of profits, and may even be maintained in case of losses. At the limit, when the corporation is not distributing a dividend, there is no issue with the

recording of *S* and *T*. Secondly, the decision to record a subsidy intervenes (long) before the corporation is in a position of distributing dividends (at least one accounting period before). As a result, this potential double counting issue cannot logically prevent recording the subsidy in the first place. Rather, it should be treated separately when it materialises. Thirdly, in any case, an issue of time of recording arises, since the dividend is distributed the year after the profit is made, not at the time the subsidy (and then the tax) would normally accrue.

54. Regarding practical implementation, the observation of the subsidy and tax components of the selling price is not as easy in this case as in the main case, given that the producer will probably not recognise a receivable in period 1 (and a decrease in receivable in period 2, with a final reconciliation in the third period). One issue is the ability to distinguish the effect of the capping from the effect of price regulation, in the absence of this receivable. The impact of the cap may be documented in the notes to the report, as the company would probably be keen to identify the effect of the cap and distinguish this from its own performance, notably for its employees (or minority shareholders). In addition, the contractual price is generally in the hands of a regulator, while the cap will be decided by a ministry/parliament, such that the regulator will – at least initially – establish the contract price independently from the cap (i.e., letting the selling price deviate in recognition of the need for the corporation to refund its first period).

3) Government foresees no end date for the period of higher prices and no explicit promise for a compensation

55. Where government decides that period 2 will be indefinite, as a substitute to final settlement, one is confronted to a limit case. It seems reasonable to consider that the case is economically similar to the previous case of public corporation not compensated by government, if there are enough expectations that the second period will actually allow to reimburse a significant amount of the losses incurred in the first period.
56. This would be deemed to be the case where the company records a receivable, clearly reflecting the view that the company has an enforceable claim – such that, if, for instance, period 2 would not significantly redeem its claim, it may eventually take legal action to ensure sufficiently rapid refunding. The claim in question may even be factored or securitised, pointing at solid expectation of recovery.