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Consumers & Markets

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Public

Reply on opinions on the draft WACC annex

Our reference : ACM/UIT/585026
Case number : ACM/21/167703

Reply on opinions on the draft WACC annex for energy and water companies in the Caribbean Netherlands for the years 2023-2025

October 2022

1. Introduction and reader's guide

1. In order to ensure that the decision-making process regarding the establishment of method decisions takes place as carefully as possible, the Netherlands Authority for Consumers and Markets (ACM) has offered stakeholders the opportunity to submit their opinions on the WACC annex. In this annex, the ACM discusses the questions and suggestions submitted by the stakeholders on the draft WACC annex for energy and water companies in the Caribbean Netherlands for the years 2023-2025.[1] This annex is part of the WACC annex Caribbean Netherlands 2023-2025 to the method decision Caribbean Netherlands 2020-2025.

2. The ACM received opinions on the draft WACC annex from:
   - ContourGlobal Bonaire B.V. (hereafter: ContourGlobal)
   - Water en Energiebedrijf Bonaire N.V. (hereafter: WEB)
   - Saba Electric Company N.V. (hereafter: SEC)
   - St. Eustatius Utility Company N.V. (hereafter: STUCO)

3. The ACM has arranged the opinions point-by-point, following the chapter layout of the draft WACC annex. The opinions are clustered, summarized, and numbered by topic. For each opinion, a table indicates which respondents have submitted an opinion, and whether the opinion has led to a change of the draft WACC annex. Each opinion is provided with a response and conclusion from ACM.

[1] Stakeholders as referred to in Article 2.1, first paragraph of the BES Electricity and Drinking Water Regulation.

2. Opinions on the general approach to the WACC

Opinion 1: "The historical data used do not represent the cost of capital in the upcoming years."

Respondent(s)	Does it lead to a change in the WACC annex?
CGB	Yes
STUCO	Yes

Summary of opinion

4. Given the COVID-19 outbreak driving the economic turmoil in 2020 and 2021, the extreme volatility and the exceptional character of the period used for the calculation (February 28, 2019-2022), CGB believes that the inclusion of this data in the historical samples distorts the forecasted risk-free rate for the WACC regulatory period and suggests this period to be excluded from the calculation.

5. CGB is of the opinion that the a one-off date closer to the publication of the report should be used for calculation of the parameters instead of a three-year period. The measurement period runs for a three-year period to 28 February 2022, only four days since Russia's invasion of Ukraine took place. According to CGB, this prompted a surge in commodity prices and a sharp short-term inflation rise, accelerating monetary policy normalization and increasing refinancing risks, in the midst of a very significant market volatility. CGB therefore suggests 30 June 2022 as the measurement date. CGB states that the exceptional situation of the three-year period analyzed and the economic forecasts for the upcoming short and medium term, a three-year period is not a fair reflection of the macroeconomic scenario that companies will face in the regulatory period to which the WACC decision applies.

6. STUCO is concerned that, given the present volatility ignited by the developments in Ukraine, the fluctuations in fuel costs and resulting high inflation, could result in major shifts in the next few years in one or more of the parameters in the mix used for calculating the WACC. STUCO wonders what provisions exist which would afford a possible reevaluation of the WACC, should inflationary factors prove the now calculated percentages to be too low.

ACM's response to the opinion

7. The ACM is aware that the current situation is extraordinary. The recent economic developments have led to increasing interest rates. However, it is always true that the risk-free rate varies over time and will be different compared to the estimate based on historical data. As such, the ACM aims to choose a reference period that produces the best estimate for the period to which the WACC decision applies.

8. When choosing a reference period, the ACM needs to find a balance between two aspects: representativeness and robustness. A reference period should not be too long, as the most recent interest rate (*the spot rate*) is the most actual estimate based on all available information at that moment. A reference period should also not be too short, as the *spot rate* is sensitive to circumstances that exist on a specific day by chance which are not representative for the future.

9. The ACM is of the opinion that using a reference period of one day, or in other words a *spot rate* for the WACC parameters (e.g. 30 June 2022) as suggested by CGB, will be too sensitive to circumstances that exist on a specific day, especially in the current situation of significant economic developments. As such, the ACM does not agree with CGB that a reference period of one day should be used instead of a longer reference period.

10. However, the ACM understands the concerns of CGB and STUCO regarding the representativeness of the reference period used for the estimation of the risk-free rate in the WACC

for the years 2023-2025. The risk-free rate is currently hard to estimate. This has become especially visible now that the interest rate on US government bond has risen rapidly and sits at a higher level even after the cut-off date for the reference period (28 February 2022). The ACM does not have a better estimator for the risk-free rate at this time. The ACM therefore introduces an annual ex-post recalculation of the risk-free rate for the cost of equity within the WACC calculation. This means that the ACM will be recalculating the risk-free rate on a yearly basis for the years 2023-2025, leading to an annual ex-post recalculation of the WACC over this period. The ACM will apply this symmetrically: both an increase and decrease of the risk-free rate will be recalculated.

11. The ACM only applies a recalculation in special cases when it is not possible to make an accurate estimate. The ACM is of the opinion that other parameters (e.g. equity risk premium or cost of debt) of the WACC do not require a recalculation, as these parameters are relatively stable over time and remain representative for the years 2023-2025. The equity risk premium is based on a long term mean and therefore quite stable over time. The cost of debt is based on a ten year step model of 59 corporate bonds. These bonds will remain representative for the upcoming years, due to the maturity of the bonds (between 9 and 13 years).

Conclusion on the opinion

12. This opinion has led to a change to the WACC annex compared with the draft WACC annex. The ACM introduces an annual recalculation of the risk-free rate for the cost of equity to the WACC annex 2023-2025. This change is described in marginal 56 and 57 of the WACC annex.

3. Opinions on the peer group

Opinion 2: "The peer groups should include electricity companies within the Caribbean to give a more comparable WACC."

Respondent(s)	Does it lead to a change in the WACC annex?
SEC	No

Summary of opinion

13. SEC notes that the peer group selected for the WACC 2023-2025 contains companies in Europe, Latin America and the United States. These selected peer groups do not have the same weather and economic terrain as most Caribbean islands. SEC therefore believes ACM should include electricity companies within the Caribbean to give a more comparable WACC with that in the region.

ACM's response to the opinion

14. For the peer group selection, the ACM considers publicly traded companies with similar systematic risk as the Dutch Caribbean companies, which derive the majority of their revenues from the same activities (in this case, electricity production and electricity distribution). The peers selected operate in Europe, Latin America and the United States, since these are the regions that potential investors in the Caribbean region might also be interested in.

15. The ACM is of the opinion that it is an incorrect assumption that it is necessary to only include companies from the Caribbean region on the basis that they would give a more accurate estimate of the regulated companies' beta. The beta only reflects a firm's systematic risk – that is, the risk that is correlated with the wider market and that investors cannot eliminate by holding a diverse portfolio of assets. The impact of weather (e.g. hurricanes) and economic terrain is diversifiable. An investor could eliminate the diversifiable risk by holding a wide portfolio of assets, for instance a wide portfolio of electricity production or distribution companies. Accordingly, investors do not need to be compensated for these circumstances through a higher cost of capital. Brattle affirms this in its report.[2] This is in line with the 2020 Court Ruling.[3]

Conclusion on the opinion

16. This opinion has not led to any changes to the WACC annex compared with the draft WACC annex.

Opinion 3: "The peer groups should include smaller countries and/or islands with a similar number of connections."

Respondent(s)	Does it lead to a change in the WACC annex?
SEC	No

Summary of opinion

17. SEC notes that the number of connections of the peer group selected for the WACC 2023-2025 may not be comparable to Saba. On Saba there is a small number of connections due to the size of the island with approximately 2,500 to 3,000 inhabitants. SEC believes it would be good for ACM to include smaller countries and/or islands in the peer group selection with a similar number of connections.

[2] The Brattle Group, "The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025", 10 May 2022, marginal 67.
[3] ECLI:NL:OGHACMB:2020:198, marginal 12.2, ECLI:NL:OGHACMB:2020:197, marginal 10.1-10.6, ECLI:NL:OGHACMB:2020:199, marginal 6.1-6.3.

ACM's response to the opinion

18. When selecting the peer group, the ACM considered companies that perform the following activities: 1) electricity production, 2) electricity distribution, and 3) water production and distribution. The companies have been selected by analyzing the company descriptions and revenue splits by activity reported in their annual accounts.[4]

19. For companies to be potential peers, the companies have to be sufficiently liquid to ensure a reliable beta estimate. The potential peers need to be publicly listed and traded companies in order to have data to base the beta estimate on. This is not the case for small-sized utility companies with a small number of connections and/or operating on small islands. Therefore, the ACM cannot consider and include these companies in the peer group selection.

Conclusion on the opinion

20. This opinion has not led to any changes to the WACC annex compared with the draft WACC annex.

[4] The Brattle Group, "The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025", 10 May 2022, marginal 20-22.

4. Opinions on the Cost of Equity

Opinion 4: "The risk-free rate calculation is incorrectly based on (only) the United States of America."

Respondent(s)	Does it lead to a change in the WACC annex?
CGB	No
WEB	No
STUCO	No

Summary of opinion

21. CGB believes that the calculation methodology for the risk-free rate should also consider yields on European and Latin American bonds as relevant to the risk-free rate, as this approach is consistent with the 2019 methodology and in line with the equity risk premium determination. The ACM determines the equity risk premium for the Dutch Caribbean companies as the average of the equity risk premium estimated for Latin America, the US and Europe, in line with the 2019 report. However, CGB notes that the report departs from the method used by the ACM in 2019 when calculating the risk-free rate for the Caribbean Netherlands. CGB notes a change from referencing the average risk-free rate for the US, Latin America and Europe to not consider yields on European or Latin American bonds as relevant to the risk-free rate.

22. WEB agrees with the ACM on removing Europe from the reference group for the risk-free rate. WEB however disagrees with the removal of Latin America. According to WEB, Bonaire is 'stuck' ('ingeklemd') between America and Latin America. Consequently both economies influence Bonaire. The risk-free rate should therefore be a mix of the risk-free rate in both continents. WEB believes the omission of Latin America in the reference group leads to a discrepancy with the asset beta, as the asset beta is based on companies globally but not on companies based in the Caribbean region. The asset beta should also be based on companies active in the Caribbean region. However, as WEB understands this is not possible due to a lack of data. It is therefore necessary to expand the reference group of the risk-free rate to Latin America.

23. STUCO raises questions on solely basing the risk-free rate on North America. It is unclear to STUCO why Latin America was omitted. STUCO also wonders why, for instance, government bond offerings within countries in the wider Caribbean were omitted and even within the countries of the Dutch Caribbean have not been taken into account.

ACM's response to the opinion

24. The ACM notes that the regulated companies in the Caribbean Netherlands, for which the cost of capital is being calculated, operate using US dollars. As such, the ACM will calculate a cost of capital to apply to assets valued in US dollars, and that will result in tariffs in US dollars. Accordingly, the relevant investment in the case of the regulated companies in the Caribbean Netherlands is an investment in US dollars.

25. As Brattle wrote in her report[5], the use of Dutch government bonds denominated in US dollars would give the most accurate estimation of a risk-free rate for a regulated company in the Caribbean Netherlands. Such bonds however have not been issued. Brattle is of the opinion that using US government bonds is a good approximation, as the country risk of the United States is comparable to the country risk of the Netherlands and the US government bonds are issued in US dollars, which matches the currency in which the regulated companies in the Caribbean Netherlands operate. The ACM agrees with Brattle that the US government bonds denominated in

[5] The Brattle Group, "The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025", 10 May 2022, marginal 36.

US dollars will give the most accurate risk-free rate for the regulated companies in the Caribbean Netherlands.

26. The ACM does not agree that there is a discrepancy between the geographical orientation when determining the asset beta, the equity risk premium and the risk-free rate as suggested by CGB and WEB. When capital markets are fully integrated, there should be one global equity risk premium. However, capital markets are not fully integrated. Investors tend to invest more in countries that are geographically close and with which they are more familiar. Because of geographic proximity, investors from Latin America and the US would likely invest in the Caribbean Netherlands. Similarly, investors from Europe would also consider investing in a Dutch Caribbean company subject to a regulatory framework they are familiar with. Thus, the ACM does not agree that there is a discrepancy between the geographical orientation when determining the asset beta, the equity risk premium and the risk-free rate as suggested by CGB and WEB. The risk-free rate is a nominal measure and therefore includes a compensation for inflation. The equity risk premium on the other hand is a real measure, i.e. cleared for inflation, which means that currency risk is not relevant for calculating the equity risk premium.[6]

27. Given the location of the Caribbean Netherlands, and the fact that the companies are regulated by the Netherlands, the ACM is of the opinion that using an average equity risk premium based on the US, Europe and Latin America is correct. Using the US, Europe and Latin America for the equity risk premium and the asset beta does not mean that a discrepancy is introduced with using the US government bonds as the most accurate estimate of a risk-free rate for a regulated company in the Caribbean Netherlands.

Conclusion on the opinion

28. This opinion has not led to any changes to the WACC annex compared with the draft WACC annex.

[6] The Brattle Group, “The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025”, 10 May 2022, marginal 51.

5. Opinions on the Cost of Debt

Opinion 5: "The calculated cost of debt is not representative for the actual cost of debt in the Caribbean Netherlands."

Respondent(s)	Does it lead to a change in the WACC annex?
WEB	No
STUCO	No
SEC	No

Summary of opinion

29. WEB is of the opinion that the normative cost of debt, which does not account for actual interest costs, does not reflect the true cost of debt in the Caribbean Netherlands. This is also not in line with the Court Ruling,[7] which explicitly states that actual interest rates should be taken into account when calculating the WACC. WEB notes that the WACC does not do justice to the financing costs of WEB, as it does not take into account specific circumstances, such as the small scale and closed economy of the Caribbean region, and volatile prices of raw materials. WEB concludes that the ACM uses bonds with an unrealistic average maturity of 10 years, while WEB attracts their financing with maturities ranging from 15 to 19 years.

30. STUCO notes that the cost of debt established at 4.54% for 2023 is on the lowest end of the spectrum of lending possibilities in the region. For 2024 and 2025 the rates applied by the ACM are even lower. Offerings on the local and regional markets are generally higher. In the case where entities might have engaged third-party financing several years ago, they must continue to meet their commitments and at the preexisting, higher rates. Given the realities of a micro economy an given the significantly higher WACC return opportunities in other territories of the region, STUCO concludes that investment at the rate indicated would not be considered attractive to most investors.

31. SEC is of the opinion that the WACC is estimated too low since the borrowing rate from a local bank is much higher. This gives a false impression of the company's sustainability. SEC asks ACM how it will resolve the difference in interest rate if SEC were to request bank financing.

ACM's response to the opinion

32. The ACM calculates a normative WACC for an efficiently financed utility company. When calculating the WACC, the ACM does not look at the actual financing costs of the regulated company. On the 21st of October 2020, the Joint Court of Justice of Aruba, Curaçao, Sint Maarten and of Bonaire, Sint Eustatius and Saba (hereafter: Joint Court) ruled that the WACC method used by the ACM, which serves to determine the reasonable return, is based on the weighted average of the costs of equity and debt and therefore on the capital costs.[8] According to the Joint Court, this means that for the capital costs (a certain) abstraction may (and must) take place from the actual costs, whereby the capital costs of an efficiently financed company (may) form the normative framework.[9] However, the ACM may not abstract from known actual costs if they are efficient in a specific case.

33. The ACM determines a reasonable return, to this end, ACM applies an approach that is in line with the Joint Court's considerations. The ACM is allowed to model efficient financing, which it does by using market data based on comparable companies for, for example, beta and gearing. In addition, we take into account historical loan portfolios by means of the staircase model and an appropriate credit rating.

[7] NL:OGHACMB:2020:197.
[8] ECLI:NL:OGHACMB:2020:197, section 6.6.
[9] ECLI:NL:OGHACMB:2020:197, section 6.6.

34. The ACM underscores that the WACC is not a guaranteed return. The realized return of a company depends on the actions and decisions by the company. If a company finances itself against a higher duration (e.g. 15 years instead of 10 years) for which the rate is higher than the cost of debt as set by ACM, this will indeed lower the return that is left for the equity holders. This strategy however can also be beneficial for a company if interest rates rise. This is similar to what would be the case in competitive markets. If a company would finance itself less efficient than its competitors, it would also not be able to charge higher tariffs to its clients to compensate for that. In that case, the higher costs of debt would also decrease the profits of the company.

35. As a measure of comparable debt to determine the cost of debt, the ACM considers the yields of BBB-rated corporate bonds issues by companies operating in the Caribbean region issued in US dollars.[10] The ACM considers an investment grade rating to be representative. Specific circumstances for the Caribbean Netherlands such as a micro- and closed-economy are caught by the rating of a bond, as a bond rating indicates its credit quality. As such, these circumstances are already taken into account in the determination of the cost of debt.

36. Furthermore, WEB references the Court Ruling[11] regarding the financing costs of CGB and that WEB's actual costs should be taken into account when calculating the WACC. The ACM recognizes that the Court Ruling indicates that if a company is efficiently financed, its actual costs should be taken into account. However, it is up to the company to substantiate this and then to ACM to demonstrate that WEB's actual costs are not efficient costs.[12] The ACM determines the cost of debt based on a debt risk profile for a BBB rating and a ten year duration. A deviation from the risk profile used by the ACM is at the companies' own risk, if the company cannot substantiate the fact that the loan taken out is efficient. A deviation can also be beneficial: for example by financing with longer or shorter durations weighing the length of the period the interest rate is fixed to interest rate developments and the subsequent refinancing situation. At the time of taking out the loan, WEB was aware of the WACC-method used by the ACM. WEB did not motivate why her interest rate is efficient. It is also not comparable with the case of CGB, as the debt in question of CGB dates to before the ACM started its tariff regulation in the Caribbean Netherlands.

Conclusion on the opinion

37. This opinion has not led to any changes to the WACC annex compared with the draft WACC annex.

Opinion 6: "The inclusion of Special Purpose Vehicles within the reference group for determining the cost of debt leads to a too low proxy of the cost of debt."

Respondent(s)	Does it lead to a change in the WACC annex?
WEB	No

Summary of opinion

38. WEB is of the opinion that the bonds considered as comparable debt within the reference group are not representative for the companies in the Caribbean region. This would be due to the bonds being issued for investments that are not made in the Caribbean region, but elsewhere in the world. WEB believes this could be due to Special Purpose Vehicles (hereafter: SPV's) that are established in the Caribbean region, but not with the purpose of investing in projects in this area. WEB notes that the risk profile of these investments does not match the risk profile of the

[10] The Brattle Group, "The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025", 10 May 2022, marginal 31.
[11] ECLI:NL:OGHACMB:2020:197
[12] ECLI:NL:OGHACMB:2020:197, section 6.6.

Caribbean region, and that the cost of debt has been set too low for the regulated companies in the Caribbean Netherlands.

ACM's response to the opinion

39. As a measure of comparable debt, Brattle considered the yields of BBB-rated corporate bonds issued by companies operating in the Caribbean region issued in US dollars with an average maturity of 10 years. Brattle has identified a list of 69 bond issues from companies in the Caribbean region that satisfy these criteria.[13]

40. The ACM considers that the criteria used by Brattle in principle will result in a sample of bonds that is representative for measuring for the cost debt of the regulated companies in the Caribbean Netherlands.

41. WEB notes that the cost of debt based on bonds including SPV's might be too low, as according to WEB, SPV's may have a different risk profile. A large difference in interests rates of SPV's compared to non-SPV's may indicate that SPV's have a different risk profile. As mentioned above, the ACM is of the opinion that the list of 69 bonds as selected by Brattle is representative. Taking into consideration WEB's concern of a too low cost of debt, the ACM additionally analyzed whether the cost of debt would be different if SPV's would have been excluded from the sample. WEB mentioned seven companies that may be SPV's.[14] Brattle has confirmed to the ACM that these seven companies indeed are SPV's incorporated in the Caribbean, but operating elsewhere. When excluding the 12 bonds issued by these companies, the cost of debt is almost the same (only 1 basis point (0.01%) lower in 2023 and 2025 and no difference for 2024). In addition to the seven companies identified by WEB, Brattle found other companies to be SPV's as well. Excluding all SPV's[15] results in a sample of seven companies with 17 bond issues. For some years the interest rate is lower compared to including the SPV's, for some years it is higher and for a number of years the difference is limited. For two years there are no observations in the sample with 17 bonds, indicating that 17 bond issues may be a too small sample size. Overall there is no indication that excluding SPV's results in a higher cost of debt. Basing the calculation on these 17 bond issues results in a cost of debt that is approximately 23 basis points lower.[16] The concern of WEB that including the SPV's in the sample would result in a lower cost of debt turns out not to be true. As the sampled bonds satisfy the relevant selection criteria, and there are no indications that the bonds issued by SPV's are not representative, the ACM does not see any reason to exclude them from the sample.

42. The ACM concludes that the original sample constructed by Brattle, containing 69 bond issues including the bond issued by SPV's is representative for the regulated companies in the Caribbean Netherlands, as the bonds in this sample represent the correct region, currency, credit rating and maturity.

Conclusion on the opinion

43. This opinion has not led to any changes to the WACC annex compared with the draft WACC annex.

[13] The Brattle Group, "The WACC for Electricity and Water Companies in the Caribbean Netherlands for the years 2023-2025", 10 May 2022, marginal 95.
[14] The bonds identified by WEB that are issued by SPV's incorporated in the Caribbean, but operating elsewhere are attributable to the following companies: *Meituan, Vale Overseas Limited, Huarong Finance Ii, Fibria Overseas Finance, Longfor Holdings Ltd, Braskem Finance Ltd* and *Weibo Corp.*
[15] The bonds additionally identified by Brattle that are issued by SPV's incorporated in the Caribbean, but operating elsewhere are attributable to the following companies: *Allied World Assurance, Bbva Global Finance Ltd., China Grt Wall Intl Iii, China Overseas Fin, China Resources Land Ltd, Cmhi Finance Bvi Co Ltd, Cn Overseas Fin Ky Viii, Contempry Ruidng Develop, Enn Energy Holdings Ltd, Enstar Group Ltd, Gerdau Trade Inc, Goodman Hk Finance, Great Wall Intl V, Hkt Capital No 1 Ltd, Hkt Capital No 4 Ltd, Hkt Capital No 5 Ltd, Intercorp Peru Ltd, Jd.Com Inc, Joy Trsr Assets Hld, Lima Metro Line 2 Fin Lt, Maf Sukuk Ltd, Marvell Technology Group, Nan Fung Treasury Ltd, Peru Enhanced Pass-Thru, Talent Yield Intntnl* and *Tengizchevroil Fin Co In.*
[16] As here are no observations for 2014 and 2015, in this calculation the interest rates for these years of the full sample of 69 bonds is used.