Breaking the climate-finance doom loop: Finance Watch amendments proposal to the Capital Requirements Regulation and Solvency II

Banks and insurance undertakings finance fossil fuel activities and thereby enable climate change, which threatens financial stability. Bank financing comprises different types of credit products, whereas financing by insurance undertakings is via equity and corporate bond investments as well as insurance coverage. Therefore, Finance Watch’s amendment proposals below focus on the capital requirements treatment of fossil fuel assets under the Capital Requirements Regulation (CRR) and Solvency II (SII). The proposals differentiate between the production and exploitation of existing fossil fuel resources on the one hand, and the exploration, production and exploitation of new resources on the other hand:

1. Treat existing fossil fuel exposures the same way as exposures deemed highly risky under current capital requirements rules of the CRR and SII.

Under the current CRR and SII rules, fossil fuel exposures are not treated in a way that is consistent with their risk profile. Given the high risk of existing fossil fuel companies’ assets becoming at least partially stranded, exposures in existing fossil fuel assets should be treated the same way as exposures currently deemed highly risky under both rulebooks. Not doing so effectively means leaving part of the risks not accounted for.

**Amendments needed to the CRR to achieve this:**

Under current CRR rules, fossil fuel financing is subject to the same credit risk weighting and, thus, the same capital requirements as other types of corporate financing. Article 122 of the CRR defines credit risk weights for corporate exposures under the standardised approach. As per Article 122, capital charges can vary from 20% to 150%, depending on the credit quality of the counterparty, i.e. external credit rating. In fact, many of the world’s biggest oil and gas companies, which are, along with coal companies, the source of over 90% of CO2 emissions, currently have high external credit ratings1. This means that the risk weights applied to their exposures fall in the two lowest categories of either 20% or 50%, which is inconsistent with the high risk these exposures represent in a stranded assets context.

To rectify this, a risk weight of 150% (under the standardized approach) should be applied to existing fossil fuel exposures. This would be consistent with the approach applied under Article 128 CRR for other items associated with particularly high risk such as, for instance, private equity.

**Amendments needed to SII to achieve this:**

Insurance undertakings finance fossil fuel companies and their activities via equity and corporate bond investments. The equity capital charges under Solvency II are 22%, 30%, 39% or 49% depending on the type of equity. Equities deemed the riskiest have a capital charge of 49%. The group of equity investments considered the riskiest under SII are, for example, risky alternative investments and risky types of unlisted equity.

To rectify this, equity investments in existing fossil fuel assets should be given the highest

---

1 The Carbon Majors Database report 2017 by CDP.
capital charge for equity investments, i.e. 49%. Under the current SII rules, however, some equity investments in fossil fuel assets fall under the group of equity types provided with a lesser capital charge of 22%, 30% or 39%. For example, certain fossil fuel equities could currently qualify as long-term equities under Article 171a and therefore be given a capital charge of only 22%. Likewise, certain equity investments in fossil fuel infrastructure entities engaged in coal, oil, gas, shale gas or bituminous sand exploration, production or exploitation could qualify as an infrastructure entity which is deemed less risky and thus given a capital charge of only 30%.

Minor amendments are needed to Articles 164a, 164b, 168, 168a, 169, 170, 171, and 171a of the SII Delegated Regulation to ensure that fossil fuel equity investments do not receive the preferential prudential treatment reserved to equities deemed less risky.

For corporate bonds and loans under Article 176 Solvency II, current capital charges have a wide range depending on the duration of the bond and the credit quality of the company (quality step)². Credit quality is determined by the companies’ external ratings. As mentioned previously, the majority of the world’s biggest oil and gas companies, which are the main source of CO2 emissions³, currently tend to have high credit ratings putting them at A to AA⁴, which should indicate a less risky investment, but does not take into account climate change risk (e.g. risk of assets becoming stranded and thereby suddenly falling heavily in value). For highly rated companies (AA) the capital charge for a 5 year maturity bond under current SII rules, for example, would be just 5.5%. If the credit quality step applied to particularly high risk bonds/loans is used to calculate the capital charge, however, it would amount to a capital charge of 37.5% for a 5 year bond/loan.

To address this, an amendment is needed to Article 176 (3) of the SII Delegated Regulation to ensure that the same credit quality steps applied to bonds deemed highly risky are applied to corporate bonds issued by existing fossil fuel companies going forward.

2. Treat exposures to new fossil fuel exploration and production under both the CRR and SII in a way that takes account of the major financial stability implications of such activities, as well as the fact that these assets will, with near certainty, become totally stranded and thus lose 100% of their value.

Capital requirements rules under the CRR and SII should take account of the fact that exposures to new fossil fuel exploration and production are even riskier than existing fossil fuel exposures as fossil fuel assets are at a very high risk of becoming fully stranded and thus losing 100% of their value. In addition, financing new fossil fuel assets increases significantly physical and disruption risks to the economy with major implications for the stability of the whole financial system. A basic risk management principle is that an activity at risk of losing its entire value should be entirely equity-funded.

As outlined in Finance Watch’s “Breaking the climate-finance doom loop” report, assets related to future fossil fuel exploration and production are extremely risky: the already explored fossil fuel reserves amount to 2910 gigatonnes of CO2, whereas the calculated carbon budget of our planet is 495 gigatonnes⁵. These numbers indicate that 84% of the explored reserves will have to be left unexploited (abandoned) in order to limit the global temperatures rise to 1.5°C; or 59% to limit temperatures rise to 2°C correspondingly. In case of new fossil fuel exploration, the assets of such operations will most certainly become entirely stranded. In the case of insurance undertakings, this will mean a complete loss of the capital invested in such assets. In the case of banks, this will mean a certain default of the obligor.

**Amendments needed to the CRR:**

---

2 The capital requirement is determined by mapping the ratings assigned to the companies by external rating agencies to the credit quality steps as per Article 176 SII. The mapping tables are included in the Commission implementing regulation COMMISSION IMPLEMENTING REGULATION (EU) 2016/1800.

3 The Carbon Majors Database report 2017 by CDP.


5 Source: Carbon Tracker Initiative based on the work of Intergovernmental Panel on Climate Change (IPCC)
A risk weight of 1250% should be applied to fossil fuel exposures related to the business of exploring, extracting or exploiting new fossil fuel resources (under the standardised approach) to make these activities entirely equity-funded.

For the institutions applying the IRB approach, an effective floor equal to the above risk weight should be introduced when determining the credit RWA of fossil fuel exposures. This would be equivalent to making the standardized approach mandatory to determine capital requirements for such exposures.

**Amendments needed to SII:**

Exposures (equities as well as bonds) to new fossil fuel exploration and production should be given a capital charge of 100%.

In the case of insurance undertakings, this proposal would be justified not only because these assets are very likely to become entirely stranded but also because financing new fossil fuel assets accelerates physical and disruption risks, which will result in increasing insurance claims for insurers. These claims will likely result in large unexpected losses for insurers, putting pressure on their solvency positions.

This amendment would simply take adding a paragraph 1 (d) to Article 169 for equity investments and a paragraph 3b to Article 176 (3) for bonds and loans.

3. Investments in any fossil fuel assets should be ineligible for the Matching Adjustment (MA) under SII.

The Matching Adjustment is a provision in SII which seeks to recognise that matching long-term assets to long-term liabilities reduces risks and that insurers that do so are less risky when determining their Solvency Capital Requirements. Given the high risk profile of fossil fuel assets, these assets should not be considered when the matching adjustment for an insurance undertaking is calculated.

4. When calculating the technical provisions required to settle the insurance and reinsurance obligations arising from insurance policies covering policyholders engaged in new fossil fuel exploration and production under SII, a 100% loss should be assumed.

Articles 29 and 30d of the Delegated Regulation (EU) 2015/35 of Solvency II stipulate rightly that the estimated cash in- and out-flows (the so-called best estimate) insurance undertakings must calculate to determine the technical provisions they need to settle their insurance and reinsurance obligations must take account of the uncertainty in expected future developments. Article 29 points out that amongst these unexpected future developments are environmental and economic developments. We agree that not taking this into account would result in insurance companies underestimating the technical provisions they need to meet their liabilities, which could endanger their solvency and with it financial stability and policyholder protection.

In the case of the liabilities arising from insurance policies covering policyholders engaged in new fossil fuel exploration and production, the best estimate is impacted by future environmental developments (climate risks) which are outlined in Finance Watch’s “Breaking the climate-finance doom loop” report.

For one, when providing insurance coverage to policyholders engaged in new fossil fuel exploration and production, insurance undertakings are very likely to incur losses as these companies will go out of business and therefore lapse on their premium payments and experience insurable events against which they will make claims such as business interruption insurance claims.

In addition, when providing insurance coverage to new fossil fuel business, insurance undertakings accelerate physical and disruption risks which will result in increasing claims for insurers across the board.

---

6 Given the own funds capital requirement of 8% per Article 92 CRR, a 1250% risk weight means that the resulting capital for fossil fuel exposures will be equal to 100% of the exposure value (1250% x 8% = 100%).
The acceleration of climate change leads to a rise in the frequency and intensity of climate change-related natural catastrophes such as floods, storms or wildfire. This will result in an increasing amount of physical destruction of assets which are covered by insurance companies’ existing property and casualty insurance business, not only with regards to policyholders engaged in fossil fuel business but clients (both business and retail) across the board. These resulting high amounts of unexpected claims will endanger individual insurers’ solvency and financial stability in general since insurers will not have taken these unexpected claims into account when estimating how much capital they require to meet their overall future obligations.

Considering the above, in order to ensure that the calculation of the best estimate for insurance policies covering new fossil fuel business is consistent with the high risk associated, the calculation should assume a 100% loss and apply a 0% discount rate for these policies.
Specific articles to be amended in REGULATION (EU) No 575/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRR) (proposed additions highlighted below)

**Article 128**

**Items associated with particular high risk**

1. Institutions shall assign a 150 % risk weight to exposures, including exposures in the form of shares or units in a CIU that are associated with particularly high risks, where appropriate.

2. Exposures with particularly high risks shall include any of the following exposures:
   (a) investments in venture capital firms;
   (b) investments in AIFs as defined in Article 4(1)(a) of Directive 2011/61/EU except where the mandate of the fund does not allow a leverage higher than that required under Article 51(3) of Directive 2009/65/EC;
   (c) investments in private equity;
   (d) speculative immovable property financing
   (e) exposures to fossil fuel companies, activities, projects and fossil fuel power plants in the cases where such exposures are related to the business of exploring, extracting or exploiting existing fossil fuel resources or running existing fossil fuel power plants.

3. When assessing whether an exposure other than exposures referred to in paragraph 2 is associated with particularly high risks, institutions shall take into account the following risk characteristics:
   (a) there is a high risk of loss as a result of a default of the obligor;
   (b) it is impossible to assess adequately whether the exposure falls under point (a).

EBA shall issue guidelines specifying which types of exposures are associated with particularly high risk and under which circumstances.

Those guidelines shall be adopted in accordance with Article 16 of Regulation (EU) No 1093/2010.

4. Institutions shall assign a 1250 % risk weight to exposures to fossil fuel companies, activities, projects and fossil fuel power plants in the cases where such exposures are related to the business of exploring, extracting or exploiting new fossil fuel resources or developing new fossil fuel power plants.

5. For the purpose of this Article:
   (a) A fossil fuel company, activity or project is defined as a company or facility engaged in coal, oil, gas, shale gas or bituminous sand exploration, production or exploitation
   (b) Fossil fuel power plants are plants burning coal, oil, natural gas or shale gas to produce power
   (c) Fossil fuel resources are defined as coal, oil, natural gas, bituminous sand and shale gas.
Article 143

Permission to use the IRB Approach

1. Where the conditions set out in this Chapter are met, the competent authority shall permit institutions to calculate their risk-weighted exposure amounts using the Internal Ratings Based Approach (hereinafter referred to as ‘IRB Approach’).

2. Prior permission to use the IRB Approach, including own estimates of LGD and conversion factors, shall be required for each exposure class and for each rating system and internal models approaches to equity exposures and for each approach to estimating LGDs and conversion factors used.

2a. Exposures defined in Article 128(5) shall not be eligible for the IRB approach.

3. Institutions shall obtain the prior permission of the competent authorities for the following:
   (a) material changes to the range of application of a rating system or an internal models approach to equity exposures that the institution has received permission to use;
   (b) material changes to a rating system or an internal models approach to equity exposures that the institution has received permission to use.

   The range of application of a rating system shall comprise all exposures of the relevant type of exposure for which that rating system was developed.

4. Institutions shall notify the competent authorities of all changes to rating systems and internal models approaches to equity exposures.

5. EBA shall develop draft regulatory technical standards to specify the conditions for assessing the materiality of the use of an existing rating system for other additional exposures not already covered by that rating system and changes to rating systems or internal models approaches to equity exposures under the IRB Approach.

   EBA shall submit those draft regulatory technical standards to the Commission by 31 December 2013.

   Power is delegated to the Commission to adopt the regulatory technical standards referred to the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1093/2010.

**I. Capital requirements for equity investments:**

**Article 164a**
Qualifying infrastructure investments

1. For the purposes of this Regulation, qualifying infrastructure investment shall include investment in an infrastructure entity that meets the following criteria:

   *(g) (new) the infrastructure entity is not involved as part of its business in any fossil fuel activities as defined in Article 164c.*

**Article 164b**
Qualifying infrastructure corporate investments

For the purpose of this Regulation, qualifying infrastructure corporate investment shall include investment in an infrastructure entity that meets the following criteria:

 *(7) (new) the infrastructure entity is not involved as part of its business in any fossil fuel activities as defined in Article 164c.*

**Subsection 1 b (new)**

**Article 164c (new)**
Fossil fuel investments

1. For the purpose of this Regulation, fossil fuel investment shall include investments in the following:

   *(a) A fossil fuel company or activity*
   *(b) A fossil fuel power plant*
   *(c) Fossil fuel resources*

2. For the purpose of this Regulation, the investments listed in paragraph 1 are to be defined as follows:

   *(a) A fossil fuel company or activity is defined as a company or facility engaged in coal, oil, gas, shale gas or bituminous sand exploration, production or exploitation;*
   *(b) Fossil fuel power plants are plants burning coal, oil, natural gas or shale gas to produce power;*
   *(c) Fossil fuel resources are defined as coal, oil, natural gas, bituminous sand and shale gas.*
Subsection 3
Equity risk sub-module

Article 168
General provisions

7. (new) The following equities shall in any case be considered as type 2:

(a) all equity investments in any fossil fuel companies, activities, reserves and fossil fuel power plants as defined in Article 164c. They shall also comprise all assets and indirect exposures referred to in Article 84(1) and (2) in fossil fuel companies, activities, reserves and fossil fuel power plants held within collective investment undertakings where the look-through approach set out in Article 84 of this Regulation is possible for all exposures within the collective investment undertaking, or units or shares of those funds where the look through approach is not possible for all exposures within the collective investment undertaking;

Article 168a
Qualifying unlisted equity portfolios

1. For the purposes of point (e) of Article 168(6), a qualifying unlisted equity portfolio is a set of equity investments that meets all of the following requirements:

(b) the ordinary shares of each of the companies concerned are not listed in any regulated market and are not fossil fuel companies as defined in Article 164c;

Article 169
Standard equity risk sub-module

1. The capital requirement for type 2 equities referred to in Article 168 of this Regulation shall be equal to the loss in the basic own funds that would result from the following instantaneous decreases:

(c) an instantaneous decrease equal to the sum of 49 % and the symmetric adjustment as referred to in Article 172, in the value of type 2 equities, other than those referred to in points (a), (b) and (d).

(d) (new) an instantaneous decrease equal to the sum of 100 % and the symmetric adjustment as referred to in Article 172, in the value of type 2 equity investments in fossil fuel companies, activities, reserves and fossil fuel power plants for the business of exploring, extracting or exploiting new coal, oil and gas resources or developing new fossil fuel power plants.

Article 170
Duration-based equity risk sub-module

2. Where an insurance or reinsurance undertaking has received supervisory approval to apply the provisions set out in Article 304 of Directive 2009/138/EC, the capital requirement for type 2 equities shall be equal to the loss in the basic own funds that would result from an instantaneous decrease:

a) equal to 22 % in the value of the type 2 equities corresponding to the business referred to in point (i) of Article 304(1)(b) of Directive 2009/138/EC, excluding any type 2 equity investments in any fossil fuel companies, activities, reserves and fossil fuel power plants as referred to in Article 164c.

c) equal to the sum of 49 % and the symmetric adjustment as referred to in Article 172 of this Regulation, in the value of type 2 equities, other than those referred to in points (a), or (b) or (d).
d) (new) equal to the sum of 100 % and the symmetric adjustment as referred to in Article 172, in the value of type 2 equity investments in fossil fuel companies, activities, reserves and fossil fuel power plants for the business of exploring, extracting or exploiting new coal, oil and gas resources or developing new fossil fuel power plants.

**Article 171**

Strategic equity investments

For the purposes of Article 169(1)(a), (2)(a), (3)(a) and (4)(a) and of Article 170(1)(b), (2)(b), (3)(b) and (4) (b), equity investments of a strategic nature shall mean equity investments for which the participating insurance or reinsurance undertaking demonstrates the following:

(c) (new) that the equity investment is not in any fossil fuel companies, activities, reserves and fossil fuel power plants as referred to in Article 164c.

**Article 171a**

Long-term equity investments

1. For the purpose of this Regulation, a sub-set of equity investments may be treated as long-term equity investments if the insurance or reinsurance undertaking demonstrates, to the satisfaction of the supervisory authority, that all of the following conditions are met:

(i) (new) the sub-set of equity investments does not include any equities that are equity investments in fossil fuel companies, activities, reserves and fossil fuel power plants as referred to in Article 164c;

**II. Capital requirements for corporate bond investments:**

**Article 176**

Spread risk on bonds and loans

3a. Exposures in the form of bonds and loans to existing fossil fuel companies, activities, reserves and fossil fuel power plants as defined in Article 164c shall be assigned a credit quality step of 5 and 6. This is regardless of whether a credit assessment by a nominated ECAI is available or not and regardless of whether the debtor has posted any collateral or not.

3b. A risk factor stress i of 100% shall be applied to all exposures in the form of bonds and loans to fossil fuel companies, activities, reserves and fossil fuel power plants for the business of exploring, extracting or exploiting new coal, oil and gas resources or developing new fossil fuel power plants. This is regardless of the duration of the bond/loan, and regardless of whether a credit assessment by a nominated ECAI is available or the debtor has posted any collateral or not.
iii. Matching adjustment:

Article 53
Calculation of the matching adjustment

3. (new). For the purpose of the calculation of the matching adjustment, any assets in fossil fuel companies, activities, reserves and fossil fuel power plants as referred to in Article 164c shall be ineligible.

iv. Technical provisions rules:

Subsection 3
Cashflow projections for the calculation of the best estimate

Article 30
Uncertainty of cash flows

2. The high uncertainty of future developments as referred to in Article 29 must be taken into account when calculating the best estimate for losses stemming from non-life insurance policies covering policyholders which are engaged in exploring, extracting or exploiting new coal, oil and gas resources or developing new fossil fuel power plants.

Given the high probability of losses arising from these policies due to future climate risks, an estimation of a 100% loss should be used for the cash-flow projection for these insurance obligations. In addition, the time value of money (expected present value of future cash-flows) used for these insurance obligations should equal 0%.

3. For the purpose of paragraph 2 of this Article:

(a) A fossil fuel company or activity is defined as a company or facility engaged in coal, oil, gas, shale gas or bituminous sand exploration, production or exploitation;

(b) Fossil fuel power plants are plants burning coal, oil, natural gas or shale gas to produce power;

(c) Fossil fuel resources are defined as coal, oil, natural gas, bituminous sand and shale gas.
About Finance Watch

Finance Watch is an independently funded public interest association dedicated to making finance work for the good of society. Its mission is to strengthen the voice of society in the reform of financial regulation by conducting advocacy and presenting public interest arguments to lawmakers and the public. Finance Watch’s members include consumer groups, housing associations, trade unions, NGOs, financial experts, academics and other civil society groups that collectively represent a large number of European citizens. Finance Watch’s founding principles state that finance is essential for society in bringing capital to productive use in a transparent and sustainable manner, but that the legitimate pursuit of private interests by the financial industry should not be conducted to the detriment of society. For further information, see www.finance-watch.org