

"Innovative Business Models for Market Uptake of Renewable Electricity unlocking the potential for flexibility in the Industrial Electricity Use"

Model Contracts

Bilateral agreements for the supply of variable renewable electricity to industrial users with flexible demand

Deliverable 3.1 June 2016









Acknowledgements

This report has been produced as part of the IndustRE project "Innovative business models for market uptake of renewable electricity unlocking the potential for flexibility in the industrial electricity use". The logos of the partners cooperating in this project are shown below and information about them and the project is available under www.IndustRE.eu

This work has been carried out by:

Becker Büttner Held – Rechtsanwälte – Wirtschaftsprüfer - Steuerberater.

Dr. Dörte Fouquet, Rechtsanwältin, Partnerin, Becker Büttner Held, Brüssel

Jana Viktoria Nysten, LL.M.; Advocaat, Attorney at law, Becker Büttner Held, Berlin

















Disclaimer

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646191.

The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither INEA nor the European Commission are responsible for any use that may be made of the information contained therein.

While this publication has been prepared with care, the authors and their employers provide no warranty with regards to the content and shall not be liable for any direct, incidental or consequential damages that may result from the use of the information or the data contained therein. Reproduction is authorised providing the material is unabridged and the source is acknowledged







Table of Contents

ACKNOWLEDGEMENTS	2
TABLE OF CONTENTS	3
EXECUTIVE SUMMARY	5
1. INTRODUCTION	9
2. BUSINESS MODEL "ELECTRICITY SUPPLY CONTRACT WITH OFF-SITE VRE"	11
2.1 Assumptions	11
2.2 GENERAL REQUIREMENTS	12
2.3 GERMANY	13
2.3.1 ENERGY LAW	13
2.3.2 GENERAL COMMERCIAL LAW	14
2.4 BELGIUM	16
2.4.1 Energy Law	16
2.4.2 GENERAL CONTRACT LAW	18
2.5 FRANCE	20
2.5.1 ENERGY LAW	20
2.5.2 GENERAL COMMERCIAL LAW	22
2.6 Italy	22
2.6.1 Energy Law	22
2.6.2 GENERAL COMMERCIAL LAW	24
2.7 Spain	24
2.7.1 ENERGY LAW	24
2.7.2 GENERAL CONTRACT LAW	27
2.8 United Kingdom	28



2.8.1 ENERGY LAW	29
2.8.2 GENERAL COMMERCIAL LAW	31
3. BUSINESS MODEL "ELECTRICITY BILL REDUCTION WITH ON-SITE VRE"	33
3.1 Assumptions	33
3.2 GENERAL REQUIREMENTS	34
3.3 GERMANY	35
3.3.1 Self-consumption with service provider	36
3.3.2 ELECTRICITY CONTRACTING	38
3.4 BELGIUM	40
3.5 FRANCE	42
3.6 ITALY	43
3.7 Spain	45
3.8 United Kingdom	46
4. CONCLUSIONS	48
ANNEX 1: OUTLINE OF A CONTRACT FOR THE SUPPLY FROM A VRE PLANT THROUGH T	
ANNEX 2: OUTLINE OF A FRAMEWORK CONTRACT FOR SUPPLY FROM AN ON-SITE VRE P	PLANT 56
ANNEX 3: OUTLINE OF A FRAMEWORK CONTRACT FOR SUPPLY FROM AN ON-SITE Y (SELF-CONSUMPTION CASE) - BASED ON GERMAN LAW AND LEGAL EXPERIENCE	
ANNEX 4: OUTLINE OF A FRAMEWORK CONTRACT FOR THE CONSTRUCTION AND MAI	NAGEMENT



Executive Summary

The overall objective of the IndustRE project is to use the potential for flexibility in energy intensive industries, to facilitate further uptake of variable renewable electricity, through innovative business models and regulatory improvements. Several different business models have been developed in the course of the IndustRE project which may allow the reaping of benefits from the combination of flexible industrial demand (in the following: FID) and variable renewable energy generation (in the following: VRE). They are described in Deliverable 2.4 "Business Models and Market Barriers.

Most of the described business models are possible in principle in the IndustRE target countries (Germany, Belgium, France, Italy, Spain and the United Kingdom), but not all of them are used in practice. In order to encourage such use and facilitate the implementation of the most promising business models, "implementation tools" have been developed.

The majority of the business models can be implemented through adaptation of the FID energy procurement and consumption patterns. In these cases the "implementation tool" is a methodology developed within the project (described in Deliverables 3.2 and 3.3; both are available for download from the project website) that quantifies the expected benefits in order to encourage the FID to take action. However, in the business models "Electricity Supply Contract with off-site VRE", and "Electricity Bill Reduction with on-site VRE" both industrial electricity users and variable energy producers are involved. In this report, as an "implementation tool" to facilitate the adoption those business models, we set the foundations for developing bilateral contracts, which can be used by the involved parties in order to sort out their mutual relations.

The business model "Electricity Supply Contract with off-site VRE" is based on the idea that the industrial electricity consumer with flexible industrial demand (in the following: FIDC) is buying electricity from a supplier with variable renewable energy generation (in the following: VRES), who in turn may benefit from the FID in order to balance the generation portfolio. For defining the conditions under which the FIDC buys the electricity from the supplier with the VRE power plants, the relevant clauses of the energy law and commercial law have been studied in all six target countries; they are outlined in the table below and are analysed in detail in chapter 2.

Country	Energy Law	Commercial law
Germany	Support under the EEG	Duration
	Grid use fees	Termination rights
	Additional charges and governmental fees	Liability
	Price provisions	General Terms and Conditions
	Balancing regime	





Chapter 3 deals with the business model "Electricity Bill Reduction with on-site VRE". In this business model the VRE power plant is located on the territorial site of the FIDC, in order to maximize the benefits from adapting production processes to the generation from the VRE power plant and reduce use-of-network charges. There are three main alternatives:

- A. The FIDC owns and operates the VRE power plant
- B. A service provider could be engaged to set up and operate the VRE power plant on behalf of the FIDC.
- C. The VRE power plant is set up and operated by another party than the FIDC, and that party maintains ownership of the plant.

The legislative and regulatory framework in the respective jurisdiction together with the specifics of the individual project define which of the three alternatives is most attractive. In setting A. (pure "self-consumption") no contracts is required other than the standard contracts with the grid operator and a supplier to cover the balance and take off the excess production. Therefore in chapter 3 we focus mainly on the settings B (self-consumption with service provider) and C (electricity contracting), in which the relationship between the parties is a bit more complex. Therein one can find detailed analysis on the applicable laws per country. The following table provides an overview:

Country	Exchange of electricity without using public grid possible?	Charges that can be avoided when not using public grid	Does on-site VRES affect the eligibility for RES support schemes
Belgium	Yes, direct lines and private networks	Distribution fees, transmission fees and federal contributions	No, whether the production is fed into the public grid does not matter for the issuance of green certificates
Germany	Yes, direct lines and private networks (closed distribution grids)	Distribution fees, transmission fees, a percentage of the EEG- Umlage, several other federal surcharges	Yes, on-site VRES is not eligible for support, only production sold to the public grid
France	Yes, but not really used	A material reduction of taxes on the price of electricity consumed through the public grid	No, French law does not distinguish between electricity consumed or produced locally and through the



			grid
Italy	Yes, closed distribution systems		
UK	Yes, direct lines and private networks	Access fees, Distribution fees, Transmission fees, Electricity Supply license	Separate support scheme (generation tariff paid by the energy supplier to the self-consumer)
Spain	Yes, direct lines and private networks	Back-up charges and additional costs have to be paid when partially connected to the grid	In the past, under the FIT regime, no longer for new installations; Possible reduction under special retributive system



1. Introduction

This report was produced within the IndustRE project and is intended to elaborate on the potential contractual relations between producers of variable renewable energy and consumers with flexible industrial demand.



Figure 0.1 Scope of the project: IndustRE target countries

Several different business models have been developed in the course of the IndustRE project which may allow the reaping of benefits from the combination of flexible industrial demand (in the following: FID) and variable renewable energy generation (in the following: VRE). They are described in Deliverable 2.4 "Business Models and Market Barriers", which is available to be downloaded at the project website.

Most of the described business models are applicable in principle in the IndustRE target countries (see figure 1.1), but not all of them are used in practice. In order to encourage such use and facilitate the implementation of the most promising business models, "implementation tools" have been developed.

The majority of the business models identified can be implemented by the FID, through adaptation of their energy procurement and consumption patterns. In these cases the "implementation tool" is a methodology developed within the project that quantifies the expected benefits in order to encourage the FID to take action. This is described in Deliverable 3.2 and 3.3; both are available for download from the project website... However, in the business model "Electricity Supply Contract with off-site VRE", and "Electricity Bill Reduction with on-site VRE" both industrial electricity users and variable energy producers are involved. Accordingly, in this report the "implementation tool" to facilitate the adoption those business models, are outlines for bilateral contracts, which can be used by the involved parties in order to sort out their mutual relations.

Chapter two deals with the "Electricity Supply Contract with off-site VRE" business model, while chapter 3 deals with the "Electricity Bill Reduction with on-site VRE" business model. In both



chapters, first the assumptions are presented, followed by a list of general requirements that have to be considered at the contracts which may serve as a "check-list". After that there is a separate section in dealing with each of the six Member States. These sections analyses for these jurisdictions the relevant regulations and discuss how these might affect the feasibility of the business models and the formulation of the bilateral contracts.

In the Annex, one can find a set of model contracts to cover the two business cases and the different alternatives within each of them. These model contracts were prepared under German law, but with the details on the legislation in the other target countries provided in chapters 2 and 3, one can get an idea of a set of important differences compared in the other jurisdictions. As the model contracts are only models, and cannot solve all open issues, they are certainly not intended as exhaustive as there are several issues that can only be defined on a case-by-case basis. Rather they are intended as rough suggestions to illustrate how those business models could be implemented in practice.



2. Business Model "Electricity Supply Contract with off-site VRE"

The business model "Electricity Supply Contract with off-site VRE" is based on the idea that the industrial electricity consumer with flexible industrial demand (in the following: FIDC) is buying electricity from a supplier with variable renewable energy generation (in the following: VRES). In such a situation, and in particular in case the supplier is a utility with more than one VRE power plant, the supplier may benefit from the FID in order to balance the generation portfolio, i.e. the variable generation from the VRE power plants. In other words, the FID provides the required flexibility to balance the supplier's position and thus reduce the supplier's imbalance charges. However, contractual arrangements would need to be made which would make the FIDC shift its production process or possibly even allow the supplier with the VRE power plant to signal to which times of the day the production process should be shifted, thus granting the Supplier some say in the control of the FIDC's production process. But even in case the supplier is a small independent power producer with just one or very few VRE power plants, one could imagine the potential benefits in case the FIDC adapts production processes so that they fall into times of high generation from the VRE power plants. This would permit the FIDC to purchase electricity for an attractive price and give the VRE power plant a stable income through the design of a specific power purchase agreement.

In any event, in such a constellation, a power purchase agreement would be needed, i.e. a contract which sets out under which conditions the FIDC buys the electricity from the supplier with the VRE power plants.

2.1 Assumptions

In order to develop model contracts to facilitate business models like the one sketched above, the following assumptions were made:

- Electricity is delivered by a supplier and produced by one or more VRE power plants.
- The supplier owns and operates the plants.
- The plants are located outside the FIDC's territory.
- The Public grid is used for supplying electricity.
- The FIDC is not exclusively supplied from the VRE power plants, but can also procure electricity from other suppliers.
- Likewise, the supplier does not exclusively supply electricity to the FIDC, but can also sell electricity to the public grid.

Regarding the technology or the capacity of the power plant, the market/reference prices or other project specific information, no assumptions were made at this point. Those would have to be examined separately and the model contracts adapted accordingly. The consumption behaviour of the FIDC is not considered either. However, it may well impact the profitability of this business model, and thus should be looked at in each individual case.



2.2 General requirements

In general, and no matter under which jurisdiction the business model is supposed to be implemented, the following "general" requirements relating to the contractual arrangements between the parties need to be addressed:

- Need for an electricity supply contract
- Provisions on amount of electricity to be supplied:
 - Different options can be considered. For example all generated VRE Could be supplied to the FIDC. In that case the FIDC would need to contract a second supplier to cover their supply for the periods of insufficient VRE generation to meet demand. Alternatively, there might be the agreement that the VRE will have to supply to FIDC all the electricity that they need, in which case the VRE will have to secure alternative supply options to cover for the period their generation is not sufficient. Also agreements might be made to either supply fixed amount, or only under certain conditions associated for example with the level of the energy prices in the wholesale market etc.
- Provisions on the price at which electricity shall be supplied:
 - Various type of arrangements are possible in an effort to reflect mutual benefits for both parties. The price can be linked to external variables, like the wholesale electricity price, or the renewable energy premium levels. Price variations can be included to encourage flexibility on the side of the energy demand. The way that the price signal is communicated from the VRE to the FIDC has to be agreed.
- Provisions on the availability of FID:
 - It has to be agreed to what degree does the FIDC adapt its production processes voluntarily as response to the price signal, or is obliged to follow the generation variations
- Duration
- Sanctions
- Liability

Further, the supplier would need grid access and grid use contracts with the grid operator, provided that the public grid is used. Note that grid use charges will have to be paid as well, in so far as the public grid is used. Further, in a setting, in which the FIDC is not exclusively supplied by the supplier owning the VRE plant(s), the FIDC would also need a supply contract with another supplier. Those contractual arrangements (between VRE and the grid operator and between the FIDC and other



suppliers) can be based on established, standard contracts and are therefore not covered in the work of this report.

2.3 Germany

Under the current renewable energy law regime in Germany, electricity from renewables is mostly sold through so called "direct selling-contracts", which means that producers receive a market-premium in addition to the revenue for electricity. The sale of electricity produced in conventional power plants is done through "ordinary" supply contracts (either bilaterally or at the exchange).

In general, for the contractual arrangements between FIDC and VRES there are thus two basic options:

- Conclusion of one single contract with a direct seller;
- Combination of a direct-selling "renewable energy contract" and one or more contracts concerning the supply of residual amounts.

Which option is more favourable depends on several issues such as prices, balancing responsibility and risk allocation.

In general, industrial customers conclude energy supply contracts which do not contain provisions on the use of the grid. Rather, the electricity supplier negotiates a contract with the grid operator that allows him to use the grid in order to supply the industrial customer. Grid fees will then normally be passed on to the industrial customer as part of the electricity bill. While German Law sets out a number of requirements relating to electricity supply contracts with household customers, for industrial customers the rules are less specific, but the general contract law rules apply. Thus, while there are more options for the parties to tailor a contract in accordance with their needs, a certain framework needs to be respected nonetheless. In this regard, there are specifics relating to energy law and to general commercial law. The former are analysed in section 2.3.1 and the latter in section 2.3.2.

2.3.1 Energy law

The following energy law issues play a major role during negotiations for electricity supply contracts in Germany:

Support under the EEG

Electricity sold to final customers under direct selling arrangements is not supported under the German Renewable Energy Law (Erneuerbare-Energien-Gesetz, EEG). As a result of this the producer may want a higher price in order to be able to finance the project. However, such price is not regulated, i.e. parties are free to negotiate in this regard.



Grid use fees

As mentioned above, grid use fees which the supplier has to pay are normally passed on to the customer. They may depend on the grid used. However, the contract should address this, and should possibly also make provision for changes in the grid use fees.

Additional charges and governmental fees

Under German energy law, there are several additional charges (EEG-charge, CHP-charge, concession fee, § 19 sec. 2 (German Ordinance for grid fees/ StromNEV-charge, offshore-liability-charge) and taxes (electricity tax and energy tax). The allocation of these charges and the risk of an increase of the relevant charges needs to be considered closely in Germany electricity supply contracts.

Price provisions

The negotiation of price provisions is crucial. This is especially true for long-term power supply agreements. In Germany, the current trend regarding price provisions is the conclusion of so-called "subset-models" which entail a certain structured application of energy prices. As a result, industrial customers are enabled to exert a greater influence on the prices by fixing certain prices for specific amounts (horizontally or vertically).

Balancing regime

A further relevant issue concerns the provisions on balancing costs and allocation of risks and responsibilities. In an increasingly market-driven energy purchase environment, there is more and more need for a balancing of risks. In Germany, the new law on the electricity market (which was adopted on June 8 2016) foresees a further strengthening of balancing obligations and possible balancing costs. Especially for combined contract models it is very important to include a provision which clearly sets out the allocation of responsibilities.

2.3.2 General commercial law

Duration

In principle, German Law does not directly set a maximum duration for electricity supply contracts for industrial customers, and different suppliers may offer different conditions. However, depending on the parties and their market position (in particular on the question whether the buyer can choose between multiple suppliers in the market for electricity) there may be restrictions stemming from competition law: if the long duration of the contract would lead to recognizable or significant distortion or foreclosure of the market, such long duration would not be allowed.

However, for this business model such effect is not assumed, which is why even a long term contracts over several years should be non-problematic. In addition, long-term contracts may be



justified in certain settings, where they are e.g. intended to ensure return on investments and thus e.g. to finance a VRE plant.

Termination rights

German Law foresees a right for parties to terminate a (longer-term) contract for an important reason at any time and without having to respect any cooling-off period (§314 BGB).

In addition, a special termination right arises in case the supplier unilaterally changes the conditions under which the electricity is supplied, notably the price (§ 41 Abs. 3 S. 2 EnWG). Customers, no matter whether household or industrial, have a right to be informed about such changes and can terminate the contract without having to respect any cooling-off period.

An issue which is specific to Germany might be the above-mentioned system of additional charges and governmental fees. Generally, supply contracts for industrial customers do not foresee termination rights in case of an increase or decrease of these cost elements. A proper risk allocation concerning additional charges and governmental fees therefore has to be included in the contract.

Liability

Under German Law, the grid operator is liable for all interruptions or disturbances in the electricity supply caused by disturbances in the grid.

However, there may be other liability cases, and normally there is a clause on (limiting) liability in the electricity supply contract – directly or in the General Terms and Conditions of the electricity supplier (see below).

German law allows limiting liability – at least when done in the General Terms and Conditions¹ - only to some extent: It is prohibited to exclude liability for intent and culpable negligence. Neither can one exclude negligent damages to life, limb and health. For all other cases of damages through negligent failure to perform substantial parts of the contract, liability cannot be excluded. It is merely possible to limit the damages to be paid to what was reasonably foreseeable at the time of the closure of the contract.²

General Terms and Conditions

Generally, for the General Terms and Conditions to apply, the contracting party needs to be explicitly informed about them to make them applicable.³ However, in business relations it is sufficient if in the offer or in the confirmation of the order reference is made to the General Terms and Conditions. However, to make them applicable to the contract, the buyer or recipient of the services needs to be able to – upon request – get them: This can be done by reference to a website, or it can even be by

³ Reference can be made explicitly but also implicitly. See: BGH NJW 1992, 1232



¹ Should the clauses have been individually negotiated, different rules may apply, however, as normally they are not, German Courts are very critical when assessing whether the clauses have been honestly been disputed. Compare e.g. BGH NJW 2005, 2543, 2544.

² E.g. (with further references) BGH NJW 1985, 3016, 3018.

simply stating that - upon request - the buyer or recipient will be sent the General Terms and Conditions. In such latter case, in order for them to apply, the General Terms and Conditions must actually be sent and received, though.4

The buyer or recipient of the services cannot normally refer to its General Terms and Conditions, as such only apply towards customers, and not "up-stream". 5 Should the contracting parties want to deviate from the General Terms and Conditions of the seller or service provider, the contract would need to specify where and to what extent deviations shall apply.

As regards the content of the General Terms and Conditions, §307 to 309 BGB apply. § 309 BGB lists a number of terms which are void per definition (e.g. one cannot shorten legal warranty periods). § 308 BGB deals with terms that are not per definition void, but can be declared so by a judge, mainly because they are too vague as regards their application. Under § 307 BGB a good faith application of the terms is required: in practice, often a violation of this provision is found where the General Terms and Conditions effectively undermine the purpose of the contract (e.g. through clauses limiting the liability for negligent failure to meet the contractual obligations).⁷ In such cases, the provision can be declared void as well and the subsequent issue can resolved by interpreting the contract.

2.4 Belgium

Under Belgian law, different sets of legislation may impact the design of a contract between the FIDC and the VRES. First of all, one has to distinguish between federal legislation, applicable everywhere in Belgium, and regional legislation, as energy is one of the topics (mostly) within the competences of the regions (Brussel, Flanders, Wallonia). However, within this report we will leave those regional differences aside and focus on the federal legislation in order to not complicate things further. Even within federal legislation, one may distinguish between energy law and general contract law. While Belgium principally adheres to the principle of contractual freedom, both these laws may be relevant and set limitations to the design of the contracts.

2.4.1 Energy Law

While Belgian Energy Law does not really restrict industrial consumers and energy suppliers in their negotiations regarding energy supply contracts, certain aspects highlighted below are of importance in the preparation of such negotiations and parties should be aware of them.

Electricity Supply Contracts

Belgian legislation defines certain minimum requirements to be met by an electricity supply contract irrespective of the type and size of the consumer. According to Art. 18 of the Royal Decree of 2 April

IndustRE

⁴ Compare e.g. BGH NJW 1992, 1232, more detailed: OLG Bremen Az. 1 U 68/03 0 7 O 733/03.

⁵ Compare e.g.BGH NJW 1992, 1232, more detailed: OLG Bremen Az. 1 U 68/03 0 7 O 733/03.

⁶ E.g. BGH NJW 2007, 3774, 3775 (= BGHZ 174, 1).

⁷ Notably: BGH NJW 1984, 1350, 1351 (= BGHZ 89, 363); more recent: BGH 24.10.2012, XII ZR 40/11.

2003 on the licenses for the supply of electricity through intermediates and the rules which apply to them ⁸ the following issues have to be dealt with in such contracts:

- Access point to the grid;
- Amount of electricity to be delivered and arrangements to regulate how to deal with possible interruptions or reductions of the supplied amount⁹;
- Prices;
- Terms and conditions of the supply, the invoicing and payment;
- Duration of the contract.

However, for the rest, regarding non-household customers, no binding rules apply to how those issues should be dealt with in the contract and much is left to the parties to negotiate.

Green Certificates (Groene certificaten)

All Belgian regions support renewable energy through a system of green certificates. Certificates are issued to all renewable electricity produced, irrespective of whether the electricity is fed into the public grid and irrespective whether it is sold directly or through a supplier. Suppliers are obliged to meet a certain quota of green electricity in their supply mix and thus buy the green certificates and submit them to the regulator to meet their obligations. At the same time, the producer gets guarantees of origin, allowing to prove to a supplier (or consumer) that renewable energy was actually produced. Those guarantees of origin offer information on where and when the electricity was produced, or in what kind of installation which may be valuable for industrial consumers with specific preferences in this regard. Those should be fixed in the electricity supply contract, if so wanted.

Note that depending on the region (Brussels, Flanders, or Wallonia) additional support programmes for renewable energy may apply. In most cases though, those will be subsidies granted from the Region's budget and thus not directly charged to the energy consumer. However, one might want to consider taking those subsidies into account when negotiating an electricity supply contract.

Grid Surcharge (Federale bijdrag)

The Belgian Federal State adds a surcharge on all electricity supplied over the public grid¹⁰. This surcharge is called the 'federale bijdrag' and covers different costs relating to the energy system in Belgium (including e.g. nuclear safety). Under federal legislation, energy intensive consumers, i.e. consumers with more than 20 MWh per year, benefit from a digressive reduction of the surcharge.

¹⁰ Compare Art. 21bis – 21quater of the Law of 29 April 1999 on the organisation of the electricity market – Wet van 29 April 1999 betreffende de organisatie van de electriciteitsmarkt



⁸ Koninklijk besluit van 2 April 2003 betreffende de vergunningen voor de levering van elektriciteit door tussenpersonen en betreffende de gedragsregels die op hen van toepassing zijn

⁹ Such contracts being explicitly allowed under Art. 19 of said Royal Decree

Nevertheless, for all energy supply contracts with transmission over the public grid, this cost factor (including the potentially applicable digression) needs to be considered. Normally however (just as grid access fees) these are already included in the price offered by the supplier. One should include a clause in the contract relating to this surcharge, allowing the supplier to pass on potential future increases and the consumer to benefit from potential future decreases of the amount, which is annually fixed by the Belgian Federal regulator (CREG) according to guidelines by the federal government.

Grid Access Fees

Grid access fees are regulated in Belgium; they are set by grid operators after approval by the regulator in order to avoid any excesses. These fees are passed on from suppliers to final consumers, and thus also form an item on the energy bill that should be considered when preparing and negotiating a supply contract. Note that while the transmission grid fees are uniform (with only one transmission grid operator in Belgium) the regional distribution grid fees may differ. For all of them, however, the information is readily available on the website of the regional regulator, so that consumers have clarity on the subject. As with the federale bijdrag, in an energy supply contract individually negotiated between an industrial consumer and a supplier, it may make sense to have a clause dealing with increases or decreases in the grid access fees.

Note that since July 2015, in parts of Belgium, a prosumer grid access fee system applies.¹¹ Prosumers had not been subject to access fees until then. Now, based on the capacity of the (PV) installation, a special fee is charged. Notably, this fee is not to be paid by the owner of the (PV) installation, but the grid user has to pay, thus the person on whom the access to the grid is registered.

2.4.2 General Contract Law

Duration

Belgian contract law does not provide a maximum duration for contracts. Energy supply contracts are often concluded for a year, with (in principle infinite) silent prolongation. Note that many energy suppliers charge contractual damages in case of early termination of such a contract. Still, depending on the setting, competition law may restrict the maximum duration. Where one big supplier is trying to bind consumers in long-term contracts with tight termination options in order to keep its market power, certain durations may apply.

Termination

Belgian contract law does not provide specific rules on the termination of contracts between energy suppliers and non-household customers, meaning that the parties are relatively free to include e.g. contractual damages in case of early termination.



¹¹ For more information, consult: http://www.vreg.be/nl/prosumententarief. (Last accessed on 16.02.2016).

In cases of deficient, delayed or non-performance, Belgian law may allow for, in case it is not otherwise agreed by the parties, the termination of the contract¹². However, this will require a notification of deficient or delayed performance, possibly with the option to still perform, and an intervention by a judge. This being the case, parties may want to address how they deal with those questions, i.e. whether they want to create provisions for certain specific cases in the contract.

Liability

As in most countries, under Belgian law, energy suppliers are not liable for continuity of the energy supply and the quality of the energy, as this is the task of the grid operators. Belgian energy suppliers are generally liable for their own doings and failures¹³. Further, energy suppliers are liable for the quality of the product they sell insofar as it renders the product non-fit for the purposes it is intended or it limits its fitness so much so that the buyer would not have bought it at all or only for a lower price ¹⁴.

Generally, Belgian law is not too restrictive when it comes to limitations of liability. Clauses limiting seller liability solely to cases of intent are tolerated. However, while there exists a discussion in literature and case law, ¹⁵ most companies resort to a limitation of liability to cases of intent and gross negligence. Further, according to Belgian case law, limitations of liability may not undermine the contract (so that the party limiting its liability is no longer really obliged to perform under the contract) and may not be contrary to the law, public order or conventions.

Belgian law allows parties to negotiate contractual damages into a contract in order to cover costs arising from deficient, late or non-performance of the contract. First of all, the contractual damages need to constitute what could be reasonably foreseen as costs of such breach of contract. Punitive damages are thus not allowed¹⁶. Also note that the judge can limit the contractual damages if they are deemed inappropriate¹⁷. As this is very relevant e.g. in cases of late payment, suppliers often include such clauses in this regard. For these reasons, one should carefully estimate and negotiate the foreseeable costs.

For different types of consumers, such as e.g. household consumers, different rules apply and a higher degree of protection is offered¹⁸, ¹⁹.

¹⁹ See on that also a recent report issued by the Belgian Federal Government, available online: http://economie.fgov.be/nl/binaries/COB30 tcm325-132236.pdf (Last accessed on 16.02.2016).



¹² Art. 1184 Civil Code - Burgerlijk Wetboek

¹³ Compare Art. 1383 Civil Code – Burgerlijk Wetboek

¹⁴ Compare Art. 1641 Civil Code – Burgerlijk Wetboek

¹⁵For an overview of the case-law, consult e.g. https://www.law.kuleuven.be/jura/art/41n1/carette.html (Last accessed on 16.02.2016).

¹⁶ Compare Art. 1226 Civil Code – Burgerlijk Wetboek

¹⁷ Compare Art. 1231 Civil Code – Burgerlijk Wetboek

¹⁸ Compare e.g. Titel 3 Wet Marktpraktijken en Consumentenbescherming– Title 3 Law on Market Practices and Consumer Protection

Good faith and abuse of right

Belgian contract law asks the parties to execute their contractual obligations in good faith²⁰. Further, contracts do not only oblige parties to what is explicitly written in them, but also to what the law, custom or equity attach to those explicit obligations²¹.

Note that this principle of good faith to some extent also applies in the pre-contractual phase, i.e. while parties are still negotiating. For example, contracts in which one party knowingly provides incorrect information that would have been important to the other party, this could be invoked to invalidate the contract. While this principle provides some protection to the parties, it does not go as far as excluding very imbalanced contracts. Rather, in principle parties have contractual freedom, and if they agree under fair conditions to a certain imbalance, then this is their choice. Still, the imbalance (in the negotiation and design, or in the performance of the contract) may never result in a so-called "abuse of right". This term ("rechtsmisbruik"), according to case law, refers to a "use of a right that clearly exceeds the normal use of such right by a diligent person". It equally refers to situations e.g. where a party uses a contractual right without reasonable and sufficient interest in its use, and the use of that right causes a disproportionate disadvantage to the other contractual party. Thus for example contracts in which the FIDC pays a much higher price to the VRES than he would have paid had he contracted with a different supplier, or undertakes certain obligations other suppliers would not have asked for, are in principle possible, provided they are not abusive.²²

2.5 France

French law knows no specific restrictions for electricity supply contracts between companies but some generally applicable rules relating to (business-to-business) contracts need to be respected. Within that framework, contractual freedom exists.

2.5.1 Energy Law

In France, the general system for power producers is based on a single buyer model: VRES sign a power purchase agreement with EDF (or in some cases with local distributors) and benefit from a fixed feed-in tariff for 10 to 20 years, without taking into account the power market price fluctuations.

As per the French legislative and regulatory framework, where no direct selling is possible, the FID combined with VRE business model can only be applied through a closed distribution systems where the public grid is not used. This system has shown some challenges in definitions over the last 5 years.

²² Note as well, that depending on the market position of the VRES and the concrete situation, competition law may become relevant and prohibit such actions.



²⁰ Compare Art. 1134 Civil Code — Burgerlijk Wetboek

²¹ Compare Art. 1135 Civil Code — Burgerlijk Wetboek

As per Article L 134-1 of the French Energy code, the energy regulatory commission (Commission de Regulation de l'Energie, CRE) is in charge of regulating the conditions of network connection on the public networks of transmission and distribution of electricity.

For many years, 'connection' has been considered as the connection to the French Public distribution network (ERDF). The ERDF held the position that a closed distribution system between a consumer and a VRE (or any power producer) was to be considered as an operation of electricity distribution which is the sole responsibility of the ERDF as per Article 18 of the 10 February 2000 Energy law and by article 24 of the 2009/72 RES Directive. This would lead to the obligation to conclude an agreement with the ERDF under the terms of the 23 April 2008 Decree.

Between 2013 and 2015, operators tried to break from this obligation or at least attempted to allow for closed distribution systems to be set up. The major shift occurred in 2015 when the French High Administrative Court (*Conseil d'Etat*) implicitly recognized the possibility of existence of private power distribution networks. This lead to the possibility to envisage FID combined with VRE²³.

However it must be pointed out that such a possibility has not yet been implemented in practice

New provisions in French law on energy transmission and green growth of August 18, 2015

French Law on energy transmission and green growth of 18 August 2015 allows for the possibility to avoid the single buyer model and feed-in tariff through the implementation of Article 28 of the 2009/72 RES Directive.²⁴

Article 167 - 13 of the Law states that the Government is authorised to enact ordinances which include the possibility of adding provisions to the energy code allowing the implementation of article 28 of the 2009/72 RES directive²⁵. Such ordinances should be adopted 18 months after the entry into force of the Law at the latest.

Therefore, the question of FID combined with VRE should be addressed in more detail as of at least March 2017.



²³ Cf. CE 9 October 2015, Union Syndicale des entreprises d'électricité et de gaz, n.370057

²⁴ Cf: la **Loi nº 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte »http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=2A45079484BCA772C23A6A744A6853B1.tpdi la21v_2?cidTexte=JORFTEXToooo31044385&categorieLien=id**

²⁵ Cf. Article 167-13 : « Le Gouvernement est autorisé à prendre par ordonnances toute mesure relevant du domaine de la loi afin : (...) 13° D'ajouter au titre IV du livre III du code de l'énergie un chapitre IV consacré aux réseaux fermés de distribution afin d'encadrer une pratique rendue possible par l'article 28 de la directive 2009/72/CE du Parlement européen et du Conseil du 13 juillet 2009 concernant des règles communes pour le marché intérieur de l'électricité et abrogeant la directive 2003/54/CE ». A l'exception de l'ordonnance mentionnée au 13° du présent article, qui est prise dans un délai de dix-huit mois à compter de la promulgation de la présente loi

2.5.2 General Commercial Law

Imbalanced contracts

The French Commercial Code²⁶ prohibits contracts which manifest a significant imbalance between the parties, i.e. between their mutual rights and obligations under the contract. So far, case law relating to this provision has mainly focused on inappropriate payment mechanisms or provisions on passing of certain costs. There is not yet a clear distinction as to what is prohibited and what is not.²⁷ Apparently, not only economic imbalance between the parties will count, but rather the content of the provision itself. Parties should thus bare this in mind when drafting their contract.

Liability

In France, the possibility to limit liability is governed by the rule of law as developed by the *Chronopost* case: Clauses limiting liability are valid, unless they exclude almost all liability and thus take away all incentives for the debtor to act with due care (take away the "cause" of the contract).²⁸ In case of intentional breach of the contract, or actions with the intention to cause damages, liability can however not be excluded. For all other degrees of negligence, *Chronopost* rule is applied. Whether liability to life, limb and health can be excluded is debated.²⁹

2.6 Italy

2.6.1 Energy Law

Under Italian energy law, power purchase agreements regarding the supply of energy may be executed either within the official energy trade market or as so called "over-the-counter" contracts (*OTC contracts*) that are executed, usually among wholesalers outside of the electricity market which is governed by the GME (Gestore Mercati Energetici SpA).

Energy Trade Market

Annex A to Decision no. 111 of 9 June 2006 by the *Autorità per l'energia elettrica il gas e il sistema idrico* (AEEG) (the Italian regulatory authority for electricity gas and water) as amended by Decision

_

²⁹See: L. Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014, p. 97f.



²⁶ Art. L. 442-6 l 2

²⁷ See L. Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014, p. 93ff.

²⁸ See: L. Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014. Auch: Cour de Cassation, Chambre Commerciale, 22.10.1996, Bulletin Civil IV, n° 261; Chambre Commerciale, 30.05.2006, D. (Dalloz Actualité) 2006, S. 2288; Chambre Commerciale 29.06.2010, Bulletin 2010, IV, n° 115.

658/2015/R/eel of 28 December 2015, sets out the terms and conditions for the execution of power purchase agreements and for dispatching and transport services provided by the grid operator with regard to feeding energy into the grid.

As the FIDC is rarely an operator of the energy trade market, it usually closes a power purchase agreement with an energy trader who offers to sell VRE through the energy trade market.

Prices are determined according to the criterion of time slots F1, F2 and F3 under resolution 2 August 2006 no. 181/2006 of the AEEG, or in accordance with 'peak' or 'off-peak' rates. It can be indexed above the national price (the energy trader takes a margin over the price).

Time slots F1, F2 and F3 are defined respectively by 'peak hours' (from 8.00 to 19.00 from Monday to Friday), 'intermediate hours' (from 7.00 to 8.00 and from 19.00 to 23.00 from Monday to Friday and from 7.00 to 23.00 on Saturday) and by 'off-peak hours' (from 23.00 to 7.00 am from Monday to Saturday and every hour on Sundays and public holidays). The 'peak' and 'off-peak' rates include only two time slots: Peak hours from 8.00 to 20.00 from Monday to Friday and the band Off-peak hours from 20.00 to 8.00 am from Monday to Friday and all of Saturday and Sunday.

Over the Counter Contracts

The other option is through OTC contracts. These are a form of direct selling contract and allow the FIDC to receive VRE without the use of an intermediate. They have to be registered with the GME and must contain information on the volume of energy to be fed into the grid as well as energy to be withdrawn from the grid, as per the so called "withdrawal schedule". In order to register with the GME, the entity or person responsible for the delivery point or the person charged with the administration of the delivery point has to open an account with the GME. There are electricity injection accounts and electricity withdrawal accounts.

Grid Access Fees

Additional costs which are borne by consumers but not part of the negotiation and execution of power purchase agreements are grid access fees. These costs will cover the dispatch of energy, its transmission and the balancing of the grid as required by Article 35 *et seq.* Decision no. 111/2006 in the latest integrated and amended version.

In fact, the FIDC, for costs other than energy, shall pay an amount comprising the network losses as well as additional fees for dispatching, transmission, distribution and metering services as well as access fees. He will also pay all other charges, including tax, fees, surcharges or tariffs, etc., as established by law or by the competent authorities' measures.

As an example, tariffs A, UC and MCT, and in particular the A3 tariff are aimed at covering the costs for encouraging the production of electricity from renewables.



2.6.2 General Commercial Law

Energy supply contracts need to respect the general rules of Italian civil and contract law.

Unfair clauses:

Under Italian law, unfair clauses have to be approved explicitly in writing by the other party if such clauses have not been negotiated by the parties. If the general terms and conditions brought by one of the parties contain fair and unfair clauses it is not sufficient to have the other party confirm the general terms and conditions as a whole in writing, but rather the unfair clauses have to be accepted in a separate autonomous and specific manner. The protection against unfair clauses applies also to business-to-business contracts if the parties have not been in equal negotiation positions (Article 1341 et seq. Italian Civil Code).

Liability

Liability may be limited under Italian Law (Article 1229 Italian Civil Code). However, liability for intent and culpable negligence may not be excluded. Clauses limiting the liability are considered unfair clauses and therefore have to be approved separately (see above).

2.7 Spain

Even though Spain is formally a unitary country, legislation from both the federal Spanish State and the seventeen autonomous communities may affect the design of a contract between the FIDC and a VRES. State law outlines the basic or uniform aspects of the energy sector, that is, basic or uniform aspects to be enforced all throughout the Spanish territory. Within that framework, the communities are free to enact their own rules. In order to avoid unnecessary complexity, this report will cover only the general framework as under Spanish state law.

2.7.1 Energy Law

The Electricity market was opened for competition by Law 54/1997 of 27 November 1997, which was replaced by the 'Energy Sector Act' or Law 24/2013 of 26 December 2013 (ESA). Spanish law concerning the production and sale of electricity has changed regularly since 2011 and has been aimed at reducing an accumulated tariff debt caused by low tariffs offered to large groups of consumers which were not sufficient to cover the costs of electricity generation.

The Specific Retributive Regime.

As introduced by the ESA and regulated by Law 413/2014, there are two groups of generators in Spain: those generating electricity under the general regime and those generating under the so called 'specific retributive regime'. Production facilities using renewable energy qualify for the specific regime and, as a benefit, receive a certain amount of retribution specific to the capacity of their installations in relation to the market price. The amount of this retribution will be calculated as per Law 413/2014 and further developed by the Ministerial Order IET/1045/2014. However, it is at



the discretion of the companies that own eligible facilities whether or not the special regime applies. Since this regime allows for the VRES to offer contracts to the FIDC at prices which are able to compete with market prices, a FIDC will want to inquire as to whether or not a VRES uses this retributive regime.

The Feed-in Tariff

In 1994, a feed-in tariff (FIT) regime was introduced for most renewable technologies and maintained by several subsequent new regulations. The tariff gives three benefits: the government will pay private producers a certain amount for all electricity generated even if it is for private use. Private producers will be also paid an amount for electricity they feed in to the public grid. And finally, private producer's electricity bills are reduced because of self-consumption. However, since the entry into force of Royal Decree-Law 1/2012, the FIT regime no longer applies for new renewable installations and is only applicable to existing plants or those not built but already registered at the Remuneration Pre-assignment Registry by 28 January 2012.

The Last Resort Tariff (renamed as "Voluntary Price for the Small Consumer" – VPSC)

The sale of electricity in Spain is done in one of three ways: on the Spanish wholesale market for market price, by reference suppliers based on the 'Precio Voluntario para el Pequeño Consumidor' -- Voluntary Price for the Small Consumer (VPSC), or independently through bilateral contracts. Reference suppliers are suppliers authorised by the government to sell electricity for a fixed price calculated by the Spanish Electric Grid (Red Eléctrica Española) according to regulation contained in RD 216/2014. The VPSC is the same in all of Spain and is the maximum price allowed to be charged by the reference suppliers. Only consumers with a power supply of 10kW or less are permitted to contract with VPSC suppliers. The Spanish National Commission for Markets and Competition (CNMC) has clarified that the contract with the reference supplier is subject to the VPSC regime unless specifically stated otherwise by the consumer. An alternative option for small consumers is to agree with reference suppliers a fixed tariff for a twelve (12) month period. In case the small consumers opt for that alternative to the VPSC, the reference suppliers are obliged to make an offer in this respect.

Suppliers which are not regulated will sell electricity on the wholesale market at market price. However, both types of suppliers have the choice to sell directly to qualified consumers under a bilateral contract for a price agreed between the parties. All consumers are entitled to opt for contracting the energy supply in the free market.

For consumers under vulnerable conditions, the Law provides the last resort tariff which consists in the VPSC price minus a social bonus. On the other hand, for those consumers which do not qualify for the VPSC regime and do not have any supply agreement with an electric supplier in the free market, the VPSC price plus a charge shall apply.

Electricity Supply contracts

In designing a contract of sale, Spanish law does not distinguish between the sale of conventional and renewable energies. Article 44, subparagraph d, subsection 1 of the ESA lists a number of



requirements which must appear in an energy supply contract regardless of whether the sale is done under the ordinary or special regime and regardless of whether the supplier is a VPSC supplier or not. These requirements are:

- Name and address of the Supplier.
- Duration of the contract. Supplier contracts subject to the PVPC regimen shall have a
 duration of 1 year. Other energy supply agreements are not subject to any legal regime but
 usual their duration is also 1 year
- Conditions for its renewal or termination.
 - The supply agreement may provide penalties for the consumer in case he terminates the supply agreement before its annual term. Those penalties cannot exceed 5% of the estimated energy pending to be consumed under the contract terminated.
 - The supply agreement can provide for other termination causes such as fraud, the prevention of the access by the supplier to the consumers' facilities to control the consumption data or negligence by the consumer regarding the use of the control equipment deposited by the supplier.
 - The contract may give the supplier the right to interrupt the supply in case of a payment default once a 2 month period has elapsed from the date that he sends a request for payment.
- Clauses allowing for the ability to revise the contract.
 - In case of contracts with reference suppliers, consumers have the option to change the price regime before the termination of the relevant supplier agreement.
- Processes for the solution of conflicts within the contract. (Contracts may be subject to arbitration or jurisdiction. In both cases, the competence will be determined by the domicile of the consumer.)
- Information on any prices or tariffs and how these are calculated.
 - The VPSC regime provides for three types of tariff with different prices subject to the consumption in different time zones (with time zone discrimination -2.0DHA-, with time zone discrimination in two periods -2.0DHA-, and with full time zone discrimination -2.0DFS).
 - Reference suppliers shall publish their fixed tariff for a 1 year period on the website of the CNMC.
 - Reference suppliers shall inform the consumer of existing price alternatives in the last invoice issued under the supplier agreement in force. That invoice must expressly provide that in case the consumer does not ask for a new agreement or for



a change of supplier, upon the termination of the agreement the same will be renewed and the same regime with the new conditions (if any) will apply.

- A minimum standard for the quality and the consequences for the supplier for not meeting this standard.
- The deadlines for the initial connection to the grid.
- Information and transparency on any commercial offers including their conditions, duration and any other terms which may apply.
- Any relevant information on any additional services which may apply, the cost of such services and whether or not these are obligatory.
- The terms and conditions of the supply which must be expressed clearly and comprehensibly and create no obstacles to the consumer's rights.

Grid Access Tariffs

All generators have a right to access the grid (with VRE producers enjoying priority dispatch)³⁰ but must pay a grid access tariff to the operator. This tariff is necessary to cover a number of the operator's costs which are then passed on from producers to the final consumers. These costs may include anything from general grid costs to an expansion of the grid³¹. They cover not only transport and distribution network costs, but also other regulated costs and subsidies. It is worthy of note that these tariffs are one of the principal measures of the ESA aimed at reducing Spain's tariff deficit. They constitute large part of the electricity bill for consumers (up to 55% in 2013) and is definitely an obstacle to VRES/FIDC contracts.

Taxes

Law 15/2012 of 27 December 2012, which has been in force as of 1 January 2013, on tax measures for energy sustainability aims at harmonizing the system on electricity taxes. In order to achieve this goal, a general tax of 7% over the value of generated electricity (under both the ordinary and special regimes) was introduced. The risk of an increase of this tax needs to be monitored when contracting for the supply of electricity in Spain.

2.7.2 General Contract Law

Article 24.4 of Law 24/2013 states that contracts concerning the supply of energy are regulated. Extra to these, which must also be adhered to, are the general provisions on contracts in the Spanish



³⁰ Art. 26, L 24/2013

civil code. Spain subscribes to the principle of contractual freedom but provides for some mandatory rules (law, moral and public policies) to be followed by the parties of the contract. Contracts with consumers are additionally subject to RDL 1/2007, approving the General Law for the Defense of Consumer's Rights, and to Law 7/1998 regulating General Contractual Conditions.

Duration

In general, the Spanish Civil Code does not provide for a limited length of a contract. Nevertheless, Spanish case law (jurisprudencia) allows parties to unilaterally terminate contracts when such a contract was entered in to without determination of its length. For one of the parties to enjoy this right it must notify the other party with reasonable prior notice.

Termination

Spanish law accepts that the agreement of the parties is enough to terminate the contract. However, if the seller delivers the object sold in such a way that it is unsuitable for use then the purchaser will have the choice to withdraw from the contract. In general, the breach of the agreement by a given party entitles the affected party to terminate the agreement and claim the relevant losses and damages suffered in consequence.

2.8 United Kingdom

The electricity and gas markets in the UK are privatised since the Energy Act 1983. Suppliers buy energy in the wholesale market and sell it on to customers in the retail market. Suppliers work in a competitive market and customers can choose any supplier to provide them with gas and electricity. For VRES this is done through long-term Power Purchase Agreements from credit worthy parties. The wholesale electricity markets in Great Britain are integrated following the introduction of the British Electricity Trading and Transmission Arrangements (BETTA) in 2005.

Most electricity is generated at large power stations connected to the national transmission network. However, electricity can also be generated in smaller scale power stations which are connected to the regional distribution networks. The number and type of power station built is the decision of each individual company based on market signals and government policy on issues such as the environment. There are many companies in the electricity generation sector, from large multinationals to small, family-owned businesses running a single site.

The electricity market design in the UK, and the many incentives available for those wishing to acquire power through renewable sources, in theory, makes it suitable for the proposed business model. Generally speaking, however, there are significant barriers within the UK's regulatory and market framework which could impede the implementation of the business model in its current form.



2.8.1 Energy Law

The UK government has introduced wide-ranging reforms to the UK electricity market through the Energy Act 2013 which will eventually see feed-in tariffs with contracts for difference (CfD) replace the Renewables Obligation as the main renewable generation support mechanism. In addition, they have introduced a capacity market as part of the Energy Market Reform.

Tariffs and Charges

There are several tariffs and charges to be aware of when setting up a supply contract under the proposed business models.

- 1. Contracts for Difference (Energy Act 2013, Part 2, Chapter 2)
 - Contracts for Difference (CfDs) will replace the Renewables Obligation as the support mechanism for large-scale low carbon generation with effect from 31 March 2017 (the date ROCs stop) for new developments. CfDs will be available for renewable energy as well as nuclear and fossil fuel plant with carbon capture and storage (CCS).
 - The CfD reduces the risks faced by low-carbon generators, by paying a variable topup between the market price and a fixed price level, known as the 'strike price'. As well as reducing the exposure to volatile and rising fossil fuel prices, the CfD protects consumers by ensuring that generators pay back when the price of electricity goes above the strike price.
 - The CfD is a contract between the generator and a new Government-owned counterparty (The Low Carbon Contracts Company), and will provide the generator with clear contractual rights and therefore increased investor certainty. This reduction in risk and increased level of certainty reduces the borrowing costs that investors face –and this saving is passed through to consumers in the form of lower expected support costs to renewable generators.
 - CfDs will have a term of 15 years, save that biomass conversion generation will only be eligible for payments until 2027, whenever signed. The Secretary of State has flexibility to adjust the term of the CfD where the technology justifies it (possibly for nuclear, CCS and tidal).
 - CfD holders will be eligible to receive payments under the CfD provided that the generator delivers at least 95% of the contract capacity.
 - The Department of Energy & Climate change made the provision of an adequate supply chain plan a pre-condition for projects over 300MW to enter the Contracts for Difference (CFD) allocation process.
- 2. FiT Generation Tariff (<u>The Feed-in Tariffs (Specified Maximum Capacity and Functions) Order</u> 2010 & Energy Act 2008, Chapter 32)



- A generation tariff will be paid by the energy supplier for each kWh of electricity generated and metered by a FiT generator. The level of tariff and the lifetime during which payment will be made varies depending on the technology type and the capacity. Tariffs will last for 20 years for most of the generating systems, except for solar PV, which runs for 25 years for systems installed before 1 August 2012 and micro-CHP (10 years). If there is more than one system generating electricity, each type of renewable energy will be metered separately.
- The tariff will be paid regardless of whether the electricity is used on-site or exported to the local electricity network.
- Once a project has been allocated a tariff, it remains on that tariff (subject to alterations in the Retail Price Index) for the life of the installation or the life of the tariff, whichever is the shorter.

3. FiT Export Tariff (Energy Act 2008, Chapter 4, Part 2)

- For exported energy, FiT generators are entitled either to receive a guaranteed tariff for any electricity generated and exported to the local electricity network or to opt out of the export tariff and sell their electricity on the open market. The generator is able to decide which option to pursue each year but will only be able to change between guaranteed export payments and market payments no more frequently than every 12 months.
- o The export tariff from 1 July 2014 is 4.77 p/kWh.

4. Climate Change Levy (Finance Act, Part 2, Article 30)

The Climate Change Levy (CCL) is a levy on supplies of electricity, gas and solid fossil fuels in the UK to businesses (subject to certain exemptions). Electricity generated from renewable sources is exempt from the CCL and generators of renewable electricity are issued with Levy Exemption Certificates (LECs) that evidence the origin of the electricity. LECs are evidence that electricity supplied to UK business customers is CCL exempt. The final customer realises the exemption from the tax. The tax rate for electricity is set within the Finance Bill each year as part of the Budget. This is something to be aware of during the establishment of a contract in the UK.

Structure and Flexibility

Self-consumption is allowed and incentivized by the tariff structures above. Industrial consumers have very strong incentives to try to forecast peak demand periods and manage their injection/withdrawals during those hours (either by using on site generation or by reducing their consumption). In the UK, from November to February there is also a "red band" time slot (generally between 17:00 and 19:00 depending on energy provider) in which unit rates decrease. This provides for the opportunity to implement dynamic price signals from the supplier.



In the UK, renewable energy producers are fully participating in the market and tend to enter long term Power Purchase Agreements (PPA) with integrated utilities, which purchase all the output from VRE at a discount of their subsidized prices, reflecting the cost of balancing plus a profit margin.

Licenses and Grid

A generation licence is required to operate electricity generation plants and this stipulates compliance with the relevant industry codes. In particular, all licence holders (for example, transmission, generation, supply and distribution) must be registered within the Balancing and Settlement Code (BSC) administered by Elexon.

Consent for lines with a nominal voltage of less than 132 kV is needed unless an exemption applies, such as the nature of the works being carried out to overhead lines constituting minor installation works (section 37, Electricity Act 1989). A supply licence allows the licensee to supply electricity to premises, that is, retail electricity to customers (Electricity Act 1989). A supply licence cannot be held in conjunction with an electricity distribution licence or an electricity interconnector licence.

The law regarding electricity supply is generally covered by the Electricity Act 1989.

Article 36 of the Act stipulates that consent is needed from the Secretary of State (at his or her own discretion) before a generating station may be constructed.

Article 16 of the Act places a duty on any distributor to connect on request, whilst Article 21 allows for additional terms of connection required of the consumer:

- (a) any restrictions which must be imposed for the purpose of enabling the distributor to comply with regulations under section 29;
- (b) any terms which it is reasonable in all the circumstances for that person to be required to accept;
- (c) without prejudice to the generality of paragraph (b), any terms restricting any liability of the distributor for economic loss resulting from negligence which it is reasonable in all the circumstances for that person to be required to accept.

Bilateral trading between generators, suppliers, traders and customers across a series of markets operates on a rolling half-hourly basis (*British Electricity Trading and Transmission Arrangements (BETTA)*, 1 April 2005). Under BETTA generators self-dispatch.

2.8.2 General Commercial Law

Duration



Under Article 10 of the Sale of Goods Act 1979, stipulations of time are entirely dependent on the terms of the contract. The Electricity Act 1989 and Energy Act 2013 do not seem to require a time limit on these types of contracts.

Liability

In general, it is set in the Sale of Goods Act 1979 that where the seller wrongfully neglects or refuses to deliver the goods to the buyer, the buyer may maintain an action against the seller for damages for non-delivery. The measure of damages is the estimated loss directly and naturally resulting, in the ordinary course of events, from the seller's breach of contract. It continues that where there is an available market for the goods in question the measure of damages is prima facie to be ascertained by the difference between the contract price and the market or current price of the goods at the time or times when they ought to have been delivered or (if no time was fixed) at the time of the refusal to deliver.

In the United Kingdom liability between undertakings can be limited in accordance with the Unfair Contract Terms Act 1977. Generally, liability for death or physical damages cannot be excluded. For all other cases of negligence, a test of reasonableness is applied – the circumstances in particular of the closure of the contract and the position of the parties are assessed, and it is seen whether such a clause can be considered "reasonable" under those circumstances.³² The test is thus always applied on a case-by-case basis and the case-law cannot be used as precedence.

If liability is limited under "written standard terms of business" such as in General Terms and Conditions, the rules prohibit restrictions regarding liability for bad performance, rules allowing substantially different performance and rules that totally exclude the obligation to perform, though under the caveat of the test of reasonableness.³³

In practice, in business-to-business contracts, in particular where both parties are in an equal negotiating position, courts rarely interfere, and wide limitations are possible.³⁴

³⁴ L. Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014, p. 105.



32

³² See Section 11 Unfair Contract Terms Act 1977.

^{33 .} Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014, p. 104.

3. Business Model "Electricity Bill Reduction with on-site VRE"

In this business model the VRE power plant is located on the territorial site of the FIDC, in order to maximize the benefits from adapting production processes to the generation from the VRE power plant and reduce use-of-network charges. Different settings are possible, the easiest being that the FIDC owns and operates the VRE power plant, as in such a scenario no contract would be needed, but the FIDC would be both supplier and consumer ("self-consumption"). Surpluses in production could be sold to the grid and deficits would be supplied from the grid, i.e. another supplier.

In another setting, a service provider could be engaged to set up and operate the VRE power plant for the FIDC. The latter might have the advantage that the FIDC would not need to take care of those tasks — which might require technical knowhow not available among the FIDC staff. The service provider could then also be the "seller" of the VRE power plant, selling a fully operational plant, including all parts and equipment, so that the FIDC would not need to bother with that either.

A third option would be that the VRE power plant is set up and operated by another party than the FIDC, and that party maintains ownership of the plant. The party would supply to the FIDC under an electricity supply contract, but could e.g. sell surplus to the grid and generate profits there as well.

As will be seen in the following, which setting is most attractive depends to a large extent on the legislative and regulatory framework in the respective jurisdiction. The first setting (pure "self-consumption") would not require a contract, except for the contracts needed with the grid operator, with a supplier to buy off the surplus with a supplier to deliver in case of deficits. As those are all more or less "normal" contracts, the focus will be put on the second (self-consumption with service provider) and on the third setting (electricity contracting), in which the relationship between the parties is a bit more complex.

3.1 Assumptions

In order to develop some model contracts to facilitate business models like the one sketched above, the following assumptions were made:

- Electricity is delivered from one or more VRE power plants.
- The VRE power plants are located on the territory of the FIDC.
- The FIDC is connected to the grid.
- The VRE power plant is connected to the grid at the same connection point as the FIDC, I.e. no use of the public grid.

No assumptions were made at this point regarding the technology or the capacity of the power plant, the market/reference prices or other project specific information., Those would have to be examined separately. The same holds true for details relating to the consumption behaviour of the



FIDC, which could also significantly impact the economic viability of or the choice between the different business models. In any event, for evaluating the different options under this business model an in-depth assessment of each individual case is needed.

3.2 General requirements

As mentioned above, in pure self-consumption, only "normal" contracts to allow grid access and use, as well as electricity supply contracts (with the FIDC being both producer and consumer) are needed. Therefore, this option is not examined further in the remainder.

Self-consumption with service provider

For the setting of **self-consumption with service provider**, the following aspects should be taken into account for the design of the contracts:

- Sales contract for the VRE power plant
 - technology, capacity, specifications, price, timeline for delivery
- Service contract for the VRE plant construction and operation, including: ,
 - Access to the territory
 - Services to be included, sanctions in case of late/faulty delivery and liability

Given that the relation between the parties is a more complex one, one might consider having a framework agreement, summarizing the mutual obligations of the parties, for which a model contract can be found Annex 4.

Electricity contracting

For the setting of the **electricity contracting**, several contracts would be required; these can be summarized in a framework contract, an example of which is outlined in Annex 3 In particular, the following requirements need to be met:

- Contract on the set up of the VRE power plant
 - Right to access and use territory
 - Provision ensuring that the VRE power plant stays within the ownership/control of the other party
 - Limited personal servitude
 - Alternative constructions



- o Right to access and use (grid) infrastructure
- o Timeline
- Sanctions in case of late/faulty delivery
- Liability
- Electricity supply contract
 - o Provisions on amount of electricity to be supplied
 - Provisions on the price at which electricity shall be supplied
 - Provisions on the availability of FID
 - Duration
 - Sanctions
 - Liability
 - Further energy efficiency service contract, e.g. to allow optimization of consumption behaviour
- Provisions on who takes over the VRE power plant after electricity supply contract expired
- Provisions on the financing of the VRE power plant?

3.3 Germany

In Germany, there are basically two models for companies that have on-site generation. On the one hand, there is the so-called self-consumption (Eigenerzeugung) which is carried out together with a separate service provider. On the other hand, the electricity-contracting model is very common. The main distinction between these two models concerns the reduced EEG-surcharge payable by self-consumers (EEG-Umlage). Due to the considerable amount of the charge (currently the regular charge amounts to 6, 17 cents/kWh) industrial customers have an incentive to set up a self-consumption energy supply scheme which avoids the respective payment obligations. However, all in all, whether this reduction of the EEG-surcharge is an advantage depends on the exact case, as FIDC may already benefit from a (further) reduction due to electricity-intensity of the production process.

Note that in Germany, electricity for self-consumption or in electricity-contracting is not supported by the EEG, as it is not fed into the public grid but either consumed directly, or sold through direct marketing. The parties may thus in any event want to consider this (see also above on electricity supply contracts).



In the following, for both settings the most relevant aspects relating to those very circumstances are sketched. Generally on the legal framework and thus the obligations applying in particular to electricity supply contracts, please see section 2.3.

3.3.1 Self-consumption with service provider

The self-consumption with service provider setting would require the procurement and installation of a RE system. This is a major project which can involve several contracts concerning issues such as financing, construction, company law issues, etc. However, these issues are not specific to the German jurisdiction but apply similarly to other countries. Therefore, in the following only a few German specifics are mentioned. .

Sales contract

With regards to the sales contract, VRE power plants (such as in particular PV or wind power installations) are mostly considered goods under German Law, at least in so far as the transfer of ownership is considered the more important part of the contract, compared to the installation of the plant. The contract is thus often considered a contract on the sale of goods with the respective legal provisions being applicable.³⁵

The distinction is particularly relevant for invoking liability for potential faults of the installation: First, according to §377 HGB such faults would have to be rebuked towards the seller right after delivery of the good. However, since for more complex technical installations faults may be detected only later, after the installation has first gone into operation, some courts have decided that the obligation of §377 HGB only starts with first full operation. Still, upon such event, the buyer should inspect and possibly raise such reprehensions right away – three months later would be too late to invoke any rights potentially arising from the fault in the good.³⁶

Second, generally, under the law on sale of goods in Germany, for all such rights arising from the fault in the good a statute of limitations of two years applies³⁷ (as opposed to service contracts for the construction of buildings, where the statute of limitations is five years)³⁸. For suppliers of construction material, if faults in the material damage the overall construction of the building, a statute of limitations of five years applies as well.³⁹ Those statutes of limitations cannot be deviated from through generally applied contract clauses, and cannot be excluded through provisions in the contract making one or other law applicable.

Thus — and as it will otherwise depend on a court's judgment in the concrete case —parties should deal with those issues in the contract: Concerning the period during which faults shall be rebuked, one should agree upon the date of first full operation — any earlier date would mean a considerable

³⁸ § 634a Abs. 1 Nr. 2 BGB.



³⁵ See: BGH, 03.03.2004 - VIII ZR 76/03 (PV installation) OLG Schleswig, 07.09.2007 - 4 U 156/06 (Wind turbine); however, other courts have decided otherwise, in particular where the installation works have been more extensive and thus more important for the buyer.

³⁶ E.g. – although not concerning VRE installations - OLG Naumburg, 25.06.2009 - 1 U 14/06.

³⁷ § 438 Abs. 1 Nr. 3 BGB.

³⁹ § 438 Abs. 1 Ziffer 2b BGB.

D3.1: Model Contracts

risk for the buyer, it appears. As regards the statute of limitations, the buyer would want to have the five years as applicable to the construction of buildings (or the supply of construction materials), likely. Should the seller try to apply – thereby circumventing a court decision to that end - the shorter statute of limitations through a clause stating that the law on the sales of goods should be applied, such cannot be done in the General Terms and Conditions, ⁴⁰ as § 409 BGB prohibits that. ⁴¹

With regards to other legal requirements relating to this service contract, it is referred to what has been written in section 2.3 regarding electricity supply contracts in Germany.

Service contract

In order to fulfil the legal conditions for "self-consumption" it is important that VRES is not considered as an "operator". This has to do with the fact that under German Law, in order to qualify for "self-consumption", the operator of the plant has to be the same person as the one who consumes the electricity produced. The operator is deemed to be the person who

- Has the actual physical authority over the power plant, in the sense that he/she can access it as all times and holds the keys to it;
- Decides in own authority on how the plant is run although it may be possible to have agents acting for the operator in this regard; and
- Bears the economic risk.⁴²

This criterion is interpreted rather strictly, and operator and consumer really need to be the same natural or legal person – e.g. if the electricity is produced by a subsidiary with separate legal personality, this cannot be regarded as self-consumption.

Additional requirements are that

- the electricity is consumed in direct spatial connection (i.e. in the immediate neighbourhood);
- the public grid is not used; and
- Production and consumption fall into the same (15 minutes) time intervals (i.e. in Germany net-metering is not possible).⁴³

While the latter criteria should be manageable by technical and spatial planning, the question of the identity of the operator would need to be solved through the formulations in the contract.



37

⁴⁰ E.g. OLG Naumburg, 25.06.2009 - 1 U 14/06.

⁴¹ Compare above, what has been said in the context of electricity supply contracts

⁴² Bundesnetzagentur, Leitfaden zur Eigenversorgung, 2015, p. 23ff.

⁴³ Bundesnetzagentur, Leitfaden zur Eigenversorgung, 2015, p. 28ff.

Given that in this business model, the FIDC would own the VRE power plant (which would have only been purchased from VRES), this may already indicate that FIDC has physical authority over and certainly bears the economic risk for the power plant (which is why in such a setting VRES should best not share in profits and losses but be paid on a lump sum basis for the services delivered). VRES is hired more as an agent, to run the power plant for FIDC on a day to day basis but not to decide in own authority how it is generally run. The contract should thus make very clear who has the authority – i.e. that VRES will have to act according to the instructions of FIDC.

The service contract could however cover also other services, for example relating to energy efficiency improvements, which VRES would perform for FIDC.

With regards to other legal requirements relating to this service contract, it is referred to what has been written in section 2.3 regarding electricity supply contracts in Germany.

3.3.2 Electricity contracting

In Germany, there is a highly developed market for energy services relating to power generation services and energy efficiency services. Both types of services are increasingly used by companies to reduce their energy consumption, make it more flexible and use economic opportunities. These models also serve well for the increased usage of renewable energy power plants for industrial processes.

Contract on the set-up of the variable renewable energy power plant

Under this setting, VRES would want to set up a VRE power plant on the territory of FIDC, but without this power plant going over into FIDC's ownership – at least not right away. However, under German property law equipment fixed to the ground becomes part of the ground, therefore the contract would need to contain a construction circumventing this principle.

A solution frequently used in practice is the limited personal servitude (beschränkte persönliche Dienstbarkeit):⁴⁴ part of the property of FIDC will for some time be appropriated to serve VRES (for the purposes of setting up and running/owning the power plant thereon). In order for this to become effective, in addition to a contract between the parties, registration is required. With an effective limited personal servitude, VRES would even be protected against FIDC selling the property, as the servitude is tied to the property as such (it cannot – for the time of the existence of the servitude – be sold without it) not to FIDC as a natural or legal person.

Considering that VRES is also supposed to build and own the infrastructure necessary to supply FIDC, the limited personal servitude should cover the parts of the territory necessary for that as well.

Depending on where on the property the VRE plant is to be located, entry or exit rights – or a right of path – could be fixed as such property law constructions.

_



⁴⁴ Compare: § 1090- 1093 BGB.

Other legal constructions may include giving the property in pledge or the like, the pros and cons of each solution depending much on the property and the interests and intentions of the parties.

Another important aspect to be dealt with contractually is the construction as such: As the VRE power plant is not sold right away to FIDC, and FIDC will not (for some time) be the owner, but will (to some extent) depend on the electricity produced therein, parties should clearly agree on the type of installations and the times of delivery. They should also clearly indicate what happens in case of delay in the construction, i.e. whether and to what extent this will invoke liability on the side of VRE. In this regard note what has been written in section 2.3 regarding liability and General Terms and Conditions in the context of the electricity supply contract.

Electricity supply contract

Depending on how the electricity supply contract is designed, the setting may still qualify for self-consumption. However, there is currently no legal certainty on that, but it is discussed in courts and with the regulator. In the following, the differences in design will thus briefly be discussed.

Self-consumption

The requirements for a setting like this, where FIDC is not the owner of the VRE power plant, to still qualify as self-consumption have been mentioned above. However, not being the owner and thus not (almost per definition) having actual physical authority and bearing the financial risk, the contract needs to make very clear, that FIDC still counts as "operator" in accordance with the rules on self-consumption.

Particularly important seems to be that FIDC explicitly is granted the actual physical authority, the final say in how the VRE plant is run and bears the economic risk (which could e.g. be solved by making FIDC pay a monthly lump sum to VRE for its services — rather than for the electricity produced).

However, as the rules applying to self-consumption in Germany have been changed rather recently, there is no certainty yet on what will count as such and what will not.

It should in this context be noted, that the privilege of reduced EEG-surcharge for self-consumers may not even be so relevant after all, and thus a simple "no self-consumption" setting may still be very beneficial for the FIDC: in case the FIDC is privileged already as energy intensive consumer, no further reduction would apply in case of self-consumption anyways.

No self-consumption

If it is not essential for FIDC to qualify for self-consumption under German Law, then one could also imagine a situation with a "simple" electricity supply contract, similar to the one discussed under business model "Electricity Supply Contract with off-site VRE" in section 2.3.



3.4 Belgium

All three settings discussed above are possible in Belgium, however, their attractiveness may differ. For the contractual design of both settings, the most relevant aspects stemming from Belgian energy law and which are additional to what has been discussed above, are sketched below. For the provisions of Belgian commercial and civil law applies what is described in section 2.4.

Groene certificaten (green certificates)

For green electricity green certificates are issued even if it is not fed into the public grid. VRES and FIDC should thus carefully assess the value of the electricity produced and the support already offered, also taking into account the following aspects.

Additional support

As mentioned in section 2.4, depending on the region different additional support programs for the development of renewable energy may apply: Those are normally financed from the region's Budget and cover certain costs in the development, such as e.g. 50% of the construction costs, or certain fixed amounts for the installation of a certain technology. In particular in an "Electricity Contracting" setting where the VRES seeks to finance the construction and operation of the installation through the sales contract with the FIDC, one should consider passing the benefit from those subsidies on to the FIDC, e.g. through a lower price for the electricity supply.

Closed distribution networks

Legislation on closed distribution networks in Belgium exists both on federal and on regional level. However, as the European Union has set the framework for this (Compare Art. 28 Directive 2009/72/EC), the rules resemble each other. Generally, the benefit of a closed distribution network is that the operator of such infrastructure does not need to comply with the requirement that they procure the energy that they use to cover losses and create reserves in a transparent and non-discriminatory manner on the market, but they can use whatever procedure they wish. Further, they do not need to comply with tariff legislation, in particular not with rules requiring approval of the grid use tariffs they charge (if they do so), but only in case this is requested by one of the customers supplied within the network (Compare Art. 28 Directive 2009/72/EC). In order to qualify as closed distribution grid, it needs to be for the supply of electricity within a geographically confined industrial, commercial or shared services site, and not – or only incidentally – household customers. Further, for specific technical or safety reasons, the operations or the production process of the users of that system have to be integrated, or the system distributes electricity primarily to the owner or operator of the system or their related undertakings.

Further, under Belgian law "direct lines", thus lines that connect energy production sites directly with energy consumption sites, do not qualify as "grid" and are thus exempted from obligations on grid operators (e.g. giving third party access, procurement on the market, tariffs etc.).

For the business model under discussion, where the public grid is not used, it may be reasonably assumed that at least a closed distribution network (under Directive 2009/72/EC, as well as under



D3.1: Model Contracts

Belgian legislation) will be constructed – if not even only a direct line (depends on the concrete decisions on the infrastructure). A consequence would be that the above-mentioned exemptions apply.

However, notably, closed distribution networks need to be registered with the regulator (regarding the transmission grid with the transmission system operator) to which they are connected. The same applies to direct lines, in so far as they leave the own site.

Electricity supply license

Belgian law requires all electricity suppliers supplying electricity to consumers by using the public grid (at voltage higher than 70.000 volt) to have a license⁴⁵. As in this business model such supply of the surplus electricity produced through the public grid may be envisioned (depending on the relative capacities of production and consumption), one should ensure that the criteria for the issuance of such a license are met. Those refer mainly to the financial and technical capacities of the applicant⁴⁶.

Balancing

Balancing is generally performed by the grid operators and the costs for that are included in the grid tariffs. Producers normally do not have to pay such grid tariffs, but those are paid by consumers. Note however prosumers in some parts of Belgium now have to share in those costs as well. Thus, in particular in an "Electricity Contracting" setting, where the role of prosumer is shared between the parties, those costs might have to be considered in the electricity supply contract between VRES and FIDC as well.

Net-Metering

Flanders and Wallonia have net-metering systems in place, allowing the measurement of electricity fed into the grid with electricity taken from the grid. To participate in those systems, special meters are required, and one has to register with the grid operator.

Participation in such systems may allow to balance supply and demand over a given time. The price ultimately paid for the electricity taken from the grid or fed into it can thus to some degree be stabilized. The effect and potential should be examined by the parties and should be used in the context of the price negotiations in the electricity supply contract between FIDC and VRES.

Interruption of the contract

_

⁴⁵ Compare Royal Decree of 2 April 2003 on the licenses for the supply of electricity through intermediates and the rules which apply to them - Koninklijk besluit van 2 April 2003 betreffende de vergunningen voor de levering van elektriciteit door tussenpersonen en betreffende de gedragsregels die op hen van toepassing zijn ⁴⁶ Compare Art. 3 Royal Decree of 2 April 2003 on the licenses for the supply of electricity through intermediates and the rules which apply to them - Koninklijk besluit van 2 April 2003 betreffende de vergunningen voor de levering van elektriciteit door tussenpersonen en betreffende de gedragsregels die op hen van toepassing zijn



D3.1: Model Contracts

As noted above, Belgian law allows for interruptible contracts or contracts under which the electricity supply is decreased under certain conditions. Depending on the production/consumption portfolio of VRES and FIDC, this option may be interesting for purchasing additional electricity from an outside supplier, for the case that FIDC's demand is higher than VRES production.

3.5 France

On the subject of promoting the private use of renewables by means of either self-consumption or establishing a direct line with a generator, France seems to be lagging behind. Where other countries have introduced schemes to remunerate consumers for self-consumed or surplus electricity sold to the grid French authorities are still discussing such a possibility. While the three settings are available, they present no significant advantage and are not really used.

Self-Consumption

Since 2008, a consumer may sign an agreement with the DSO that all electricity produced will be consumed on site and, technically speaking, enjoy a reduction on certain charges. Such a reduction comes from the fact that consuming electricity privately generated on site will decrease the amount of electricity needed to be imported from off-site generators. The specific charges that will be reduced are the 'renewable and social surcharge', the municipal final tax on electricity consumption and a reduction of VAT. Additionally, French self-consumers are not remunerated for electricity fed back in to the grid.

Closed Distribution Networks

Establishing a direct line with an on-site generator is legally permitted in France but is subject to rather rigorous administrative requirements. Such a connection would make the consumer profit from the technical reductions as with self-consumption. Concerning the design of the contract, the electricity sold between the parties forming a direct line will be made identically as if the sale were made through the public grids.

Guarantees

French courts allow contractual deviations regarding warranties: between undertakings active in the same business sector, one can exclude warranties of a good also against hidden defects. However, the difficulty may be to determine whether the undertakings are active in the same business sector, which in any event seems unlikely in this setting. Otherwise, the FIDC could build its own VRE power plant. ⁴⁷

⁴⁷ Art, 1643 Code Civil: Also: L. Leuschner, AGB Recht für Verträge zwischen Unternehmen – unter besonderer Berücksichtigung von Haftungsbeschränkungen, Forschungsprojekt im Auftrag des Bundesministeriums der Justiz und für Verbraucherschutz 2014, p. 98.



3.6 Italy

In setting 1 (self-consumption with service provider) and setting 2 (electricity contracting), the VRES and the FIDC will enter into a contract for the construction of a generator on a plot of land or building owned by the FIDC and in setting 2 in to an agreement regarding the operation of the VRE by a service provider. The aforementioned and subsequent contracts executed on the construction and operation of the plant have to respect the general rules and principles of Italian Law (if Italian Law applies). In this regard please refer to Chapter section 2.6.

In setting 1 and 2, the FIDC acts vis-à-vis the grid operator as producer and final consumer and is in charge of all agreements regarding the feed-in and withdrawal of energy to the grid. He will also be responsible for dispatching and transport services to be entered into with the grid operator.

In the following, thus, the most relevant issues relating to those external contracts are presented:

Eligible systems

Attachment A to AEEG Decision no. 578/2013/R/eel as amended *inter alia* by Decision no. 242/2015/R/eel contains provisions for the setup and the operation of systems. This law defines several systems of production and (self-) consumption. The ASSPC (Other Simple systems of production and consumers) include the following systems:

- (i) SEU (Sistemi Efficienti di Utenza user efficiency system): a system including one or more renewable energy generators with an overall output of less than 20 MW connected by a private connection, with no third-party connections, to a single consumer (for example an FIDC). Furthermore, the generator(s) have to be installed on the same site which is owned or at the disposal of the final consumer (FIDC) who places the site at the disposal of the supplier. The supplier running the generator(s) and the final consumer can be, but do not have to be, the same natural or legal person.
- (ii) ASAP (sistema di autoproduzione system of self-production): a system in which an entity generates energy and consumes at least 70% of the energy produced.

Any power generating system consisting in one or more generation units and one or more consumption units not falling under the definitions of eligible systems of production and consumption set forth under Decision no. 578/2013/R/eel are not admissible and may not be connected with the public grid.

Closed distribution system - RIU

If the power plant is not connected to the public grid but to an internal grid (reti interni d'utenza-RIU) with no third-party connections, a special provision applies (Article 33 Law No. 99/09).

Net-metering

The final consumer in an ASSPC can benefit from net-metering if he is also the producer in the ASSPC or has obtained a proxy to represent the producer of the generators in the ASSPC. However, net-



metering is limited to systems with renewable energy plants having an overall output of less than 500 kW.

Setting 3 allows the service provider and the FIDC to choose if they intend to benefit from the advantages offered by Decision no. 578/2013/R/eel to the ASSPC or if they prefer to enter into a simple electricity supply contract as described under business model A2.2.

The FIDC and the service provider could agree to enter into an agreement for the lease of a building (diritto di superficie) on a plot of land owned by FIDC. Such building lease right gives the service provider the right to build a VRE power plant on the plot of land owned by the FIDC avoiding that such plant becomes part of FIDC's property. This would have to be registered with the competent land registry and gives the service supplier a safe position against third parties and the FIDC.

The final client (FIDC) and the producer (supplier and owner of VRE) may then enter into a bilateral agreement regarding the sale and purchase of the energy produced (see above).

Alternatively, the FIDC and the supplier may decide to proceed with a SEU to benefit from the favourable conditions granted to ASSPC. In order to qualify as SEU, the plot of land where the plant is constructed has to be owned by the FIDC or be at its disposal. The VRE is owned by the supplier and FIDC and supplier have entered into an operative lease agreement or a similar agreement.

Regarding the agreements with the grid provider and the agreements for the sale and purchase of energy fed into or withdrawn from the grid, there are different contract options:

- 1. The FIDC and supplier can enter into an agreement with regard to the energy consumed in self-consumption by the FIDC and decide that the supplier shall enter into the agreements with the grid operator regarding the energy fed into the grid. The FIDC shall enter into the agreements regarding the purchase of energy from the grid. The FIDC needs to grant permission to the supplier regarding the use of the connection point for the feeding-in of the energy by the supplier. In this case net-metering is not possible, but the supplier could enter into a simplified purchase and resale arrangement ("ritiro dedicato") with the GSE.
- 2. The FIDC and the supplier enter into a private bilateral agreement regarding the energy consumed by the FIDC and the supplier grants a mandate to the FIDC to act on its behalf regarding the agreement for the dispatching and transport of the energy and the sale and purchase of the energy fed in to or withdrawn from the grid. In this case net-metering is possible.
- 3. The FIDC grants a mandate to the supplier to enter into all agreements regarding the dispatching and transport of the energy feed into or withdrawn from the grid and the sale of the energy produced by the VRE plant not consumed by the FIDC as well as regarding the purchase of additional energy for the FIDC. In this scenario the supplier acts as retailer of the energy withdrawn from the grid vis-à-vis the FIDC and therefore has to fulfil the legal requirement set forth for retail sellers of electric energy.

Also in this case net-metering is excluded.



A final option exists where the FIDC and the supplier can grant a mandate to a third party/wholesaler to manage all agreements with the grid operator. In this case the ICE and the supplier will enter into a bilateral agreement with regard to the energy consumed directly by the FIDC. The FIDC and the supplier grant a mandate to the third party/wholesaler for the execution of the agreements with the grid operator regarding the access to the grid (dispatching and transport agreements) and regarding the energy fed into and withdrawn from the grid. Net-metering is excluded.

3.7 Spain

In Spain, all three settings for this model are possible, but, considering the current regime in Spain, may not be too attractive. Regarding their contractual design, the important aspects have been dealt with under section 2.7.

Self-Consumption

Art. 9, subsections 1), 2) and 3) of Law 24/2013 distinguish between 3 different kinds of autoconsumers: 1) a consumer with a private generator intended for his own consumption (pure self-consumption), 2) a consumer associated with a producer located within his own grid and 3) a consumer with a direct line to a producer. RD 900/2015 then specifies that two different sets of legal consequences apply to pure auto-consumers (type 1) and auto-consumers associated with a producer or with a direct line to one (type 2). For type 2 consumer, independent of whether the consumer and producer are one and the same, 2 parties exist: a consumer and a producer. The sale of electricity between these 2 will be subject to the same conditions as a sale done under the model "business contract with off-site VRE".

If a FIDC wishes to produce electricity as any of these types of consumers it will have to register with the Electricity Self-Consumption Administrative Register and will most likely be subject to certain variable or fixed costs.

Net-metering

Article 14 of RD 900/2015 allows for all type 2 consumers to be remunerated for any surplus electricity fed in to the grid. This authorisation also applies to any producer of electricity generating under the Specific Retributive Regime (detailed in section 2.7).

Backup Charges

Both types of consumers must pay a back-up charge per kWh produced if either the generator or consumer are completely or even partially connected to the grid. If this is the case then it is mandatory for all consumers to have a contract of access to the grid that reflects the conditions of auto-consumption. It is worthy of note that if a consumer and producer are the same legal or physical person, a joint contract of access can be made. Both types of consumers will then still



subject to grid access fees, charges associated to systems costs and charges for other grid services. However, type 1 consumers with a contracted power equal to or less than 10kW may be exempted from variable charges. If neither the consumer nor the producer is connected to the grid, then both may avoid these charges. The producer may however, in no circumstance, be linked to more than one consumer. It could be said that this system therefore indirectly encourages such consumers to disconnect themselves from the grid in order to avoid such charges. These measures were introduced by the Spanish legislator specifically as a disincentive for the self-production and consumption of electricity, with the exception of very low-powered consumers. Since this measure puts particular strain on the private production of electricity, this model of contract between the FIDC and a VRES may not be advisable under the Spanish regime for the time being.

When it comes to the question if exchange of electricity without using the public grid is an option in Spain one must thus realise that RD 500/2015 prohibits that a generator can be connected with other consumers through a private grid. Only individual installations for self-consumption not connected to the public grid are out of RD 900/2015, which regulates self-consumption of electricity. All installations for self-consumption connected to the public grid, even if they do not pour energy to the public grid, are subject to such a RD 900/2015. To be connected to the public grid assures the uninterrupted supply of energy.

The "Support Charge" (Peaje de Soporte -energy acquired-) and the "Access Charge" (Peaje de Acceso -energy self-consumed-) apply. All self-consumption installations, independently if they are or not connected to the public grid, shall pay the "Charges associated to the costs of the electric system" (section 17 RD 900/2015) and the Charges for others services of the system (section 18 of the RD 500/2015).

Self-consumers under 10kW which do not pour energy back in to the public grid shall not pay the access and connection fees.

On Site VRE does not affect the eligibility for the RES support mechanism. The incentive schemed adopted by Spain has been the FIT. Some autonomous communities have public aids and other incentives.

3.8 United Kingdom

In the UK, the different options of the business model under discussion are possible as well. Besides the considerations above regarding the business model with off-site VRE the following may need to be taken into account.

Self-consumption

A new scheme was opened in February 2016 for self-consumption. A generation tariff is paid for each unit of generated electricity. The rates vary depending on the size of the system, date of installation and efficiency of self-consumer's property. The amount is paid by the energy supplier. The consumer may choose from a list of registered suppliers.



An export tariff of 4.77p is currently paid per unit of electricity for all not utilized units that are sold back to the electricity supplier.⁴⁸ Up to half of the units of generated electricity may be sold. An export meter is necessary for installations above 30kW.

Electricity supply license

As set in the Electricity Act 1989, electricity suppliers are required to have a license. However, certain exemptions may be granted. The Electricity Order No. 3270 2001 grant an exemption to small suppliers, who supply electricity generated by themselves up to 5 MW of which up to 2,5 MW is supplied to domestic consumers. Exemption may be also be awarded to an offshore supplier for self-generated electricity utilized by the generating installation itself and also to an on-site supplier provided that the output of self-generated electricity is supplied to limited number of consumers. Moreover, an exemption may be granted to resale supply under certain conditions.

Closed Distribution Networks and Direct Lines

The United Kingdom allows for Independent Connection Providers (ICPs) and Independent Network Distribution Operators (IDNOs) to compete with the main licensed DNOs in providing electricity. These independent providers must also be licensed but the requirements for obtaining such a license are less stringent. IDNO prices are subject to 'Relative Price Control' which means that their prices will be capped at a level broadly consistent with the equivalent DNO charge.

Since ICPS and IDNOs are extensions to the grid, consumers contracting with them will still be subject to access fees and other charges public connection entails. Theoretically however, if both a privately owned generator (built for internal use only) and the FIDC were not connected to the public grid, neither would be subject to any access fees nor would require an electricity supply license.

Balancing

Balancing of the system is regulated by the Gas and Electricity Markets Authority working through Ofgem. Compliance with balancing requirements is included in individual generation and supply licenses, and generators and suppliers may also negotiate or bid for the provision of certain types of balancing services.

Balancing activity is based on half hour periods ('Settlement Periods'). Suppliers and generators provide details of their contractual positions one hour before each settlement period. They also provide estimates of their likely actual generation and demand in that period, and what they would charge or be prepared to pay for altering their level of generation or demand ('bids and offers').

_



⁴⁸ Government UK: <u>https://www.gov.uk/feed-in-tariffs/overview</u>

4. Conclusions

The business model "Electricity Supply Contract with off-site VRE" is based on the idea that FIDC is buying electricity from VRES, who in turn may benefit from the FID in order to balance its generation portfolio. The relevant clauses of the energy law and commercial law have been studied in all six target countries; the main aspects are outlined in the table below and are analysed in detail in chapter 2.

Country	Energy Law	Commercial law
Germany	Support under the EEG	Duration
	Grid use fees	Termination rights
	Additional charges and	Liability
	governmental fees	General Terms and Conditions
	Price provisions	
	Balancing regime	
Belgium	Electricity Supply Contracts	Duration
	Green Certificates (Groene	Termination
	certificaten)	Liability
	Grid Surcharge (Federale bijdrag)	Good faith and abuse of right
	Grid Access Fees	
	Now provisions in Franch law on	Imbalanced contracts
France	New provisions in French law on energy transmission and green	imbalanced contracts
	growth of August 18, 2015	Liability
Italy	Energy Trade Market	Unfair Clauses
	Over the Counter Contracts	General Terms and Conditions
	Grid Access Fees	
Spain	The Specific Retributive Regime	Duration
	The Feed-in Tariff	Termination
	The Last Resort Tariff (renamed as	
	"Voluntary Price for the Small	



D3.1: Model Contracts

	Consumer" – VPSC)	
	Electricity Supply contracts	
	Grid Access Tariffs	
	Taxes	
UK	Tariffs and Charges	Duration
	Structure and Flexibility	Liability
	Licenses and Grid	

In the "Electricity Bill Reduction with on-site VRE" business model the VRE power plant is located on the territorial site of the FIDC. We focused on the cases where the VRE is operated by a third party, who might also own the plant or just operate as a service provider. In both cases bilateral contracts are required and we studying the laws that have to be taken into account when drafting these contracts. There is detailed analysis on the applicable laws per country in chapter 3. The following table provides an overview:

Country	Exchange of electricity without using public grid possible?	Charges that can be avoided when not using public grid	Does on-site VRES affect the eligibility for RES support schemes
Belgium	Yes, direct lines and private networks	Distribution fees, transmission fees and federal contributions	No, whether the production is fed into the public grid does not matter for the issuance of green certificates
Germany	Yes, direct lines and private networks (closed distribution grids)	Distribution fees, transmission fees, a percentage of the EEG- Umlage, several other federal surcharges	Yes, on-site VRES is not eligible for support, only production sold to the public grid
France	Yes, but not really used	A material reduction of taxes on the price of electricity consumed	No, French law does not distinguish between electricity



D3.1: Model Contracts

		through the public grid	consumed or produced locally and through the grid
Italy	Yes, closed distribution systems		
UK	Yes, direct lines and private networks	Access fees, Distribution fees, Transmission fees, Electricity Supply license	Separate support scheme (generation tariff paid by the energy supplier to the self-consumer)
Spain	Yes, direct lines and private networks	Back-up charges and additional costs have to be paid when partially connected to the grid	In the past, under the FIT regime, no longer for new installations; Possible reduction under special retributive system



Disclaimer

The following different model contracts are only intended to give an outline and an idea for the structure and main points to be observed when concluding those contracts. They are by no way exhaustive or directly applicable. Each contractual situation requires a specific and individual legal analysis and preparation for each single case. The contracts are based on the law and experience under German jurisdiction

Annex 1: Outline of a Contract for the Supply from a VRE plant through the public grid

Note: This contract outline is based on German law and legal experience

Between

The IEC Industry

In the Following: IEC,

and

The VRE production company,

In the Following: VRE,

Together: The Parties,

the following contract will be concluded:

§1 Objective

(1) The Parties aim to optimally supply IEC with electricity produced by a variable renewable energy power plant (Details in Annex 1) constructed, owned and operated by VRE. (Note: Parties could identify a specific plant, or technology here, and e.g. via guarantees of origin "proof" that the electricity comes from that power plant.)



- (2) In order to allow an optimization of supply and demand, the Parties agree to introduce a system, in which IEC adjusts production processes in such a way, that the times of high electricity demand are the times of high production from VRE's variable renewable power plant.
- (3) To that end, the Parties agree to cooperate, fulfill their respective obligations and grant each other the respective rights needed as in accordance with this contract.

§2 Conduct of the Parties towards each other

- (1) The Parties will make their best efforts to realize this project. They will in particular share all information necessary to make a successful cooperation possible.
- (2) In their business decisions, the Parties will in good faith take into considerations their respective mutual legitimate expectations and will where necessary and appropriate consult each other.

§3 Electricity Supply

- (1) VRE will supply electricity to IEC. Electricity will only be supplied as in accordance with the capacity and actual generation of the variable renewable energy power plant owned by VRE. VRE will supply the electricity generated without reserve or balancing electricity and net of own electricity demand.
- (2) IEC is obliged to meet all its electricity demand primarily from the electricity supplied from the variable renewable energy power plant (take or pay) owned by VRE. Only where such electricity generation is not sufficient, IEC may buy from a third party. To that end, the Parties agree that IEC may keep another electricity supply contract ...
- (3) IEC agrees to adapt its demand profile to the production forecast of VRE. This includes in particular, that IEC will shift its production activities to times of high generation in the variable renewable energy power plant as in accordance with the forecasts provided by VRE.
- (4) VRE is obliged to operate the plant at least ... hours per year at full capacity. Surplus electricity produced and exceeding IEC's demand will not be compensated by IEC.
- (5) In order to allow IEC to adapt production activities, VRE has to inform IEC through a weekly and daily forecast of the production of the variable renewable energy power plant. An example of the layout and content of such forecast is attached in Annex 4. Upon request, VRE shall anytime answer all questions relating to the production in the variable renewable energy power plant to IEC.

§4 Price of electricity

(1) The Parties agree that the price IEC pays for the electricity supplied by VRE under this contract will be at least ...).



- (2) The prices take into account times of high generation and times of low generation, i.e. are variable. The exact prices for the supply of the electricity and the clauses relating to their adaptation are set out in Annex 2, with the conditions of Annex 3 being applicable (Price Sheet of VRE, General Terms and Conditions of VRE). Those are net prices; any applicable taxes and surcharges will be added. Surcharges which find their basis in generally applicable provisions relating to grid use, as set under the relevant legislative framework, are not included and will in case they arise be settled separately.
- (3) Price adaptations shall be communicated to IEC in advance. VRE has to calculate necessary price adaptions in good faith and based on actual developments of the costs (increase or decrease). In case of such price adaptions, IEC retains a special right to terminate the contract.

§5 Renewable electricity and guarantees of origin

- (1) VRE provides proof of the production from the variable renewable energy power plant to IEC. This shall be done by handing over, by the end of each year, a number of guarantees of origin corresponding to the amount of electricity delivered.
- (2) VRE does not charge any additional costs to IEC for the delivery of those guarantees of origin. Their delivery is included in the price for electricity under this contract.

§6 Grid use and metering

- (1) IEC will conclude a grid use contract with the grid operator to which the industrial property is connected, allowing to be supplied through the grid infrastructure in accordance with the electricity supply contract with VRE subject to § 3 of this Framework Contract.
- (2) VRE will conclude a respective grid use contract with the grid operator allowing to supply IEC under the electricity supply contract subject to § 3 of this Framework Contract.
- (3) As far as nothing else has been agreed between the Parties, the grid operator of the grid to which IEC is connected will be the operator of the metering point and responsible for the metering services. As operator, he will be in charge of the installation, servicing and operation of the meters. In his function as service provider, he will read out the meters. The details will be set out in a contract to be concluded with the grid operator.

§7 General Terms and Conditions

Where and in so far Parties have not deviated from them in this contract, VRE's General Terms and Conditions are applicable.

§8 Duration of this contract

- (1) This contract enters into force at the day of signature by both IEC and VRE.
- (2) This contract is first concluded for two years. After expiry of those first two years, it will be



- prolonged on a yearly basis, if and as long as none of the Parties terminates it.
- (3) Termination of this contract is possible only in writing. A two-month' notice period has to be respected.
- (4) Any special termination rights, through VRE's General Terms and Conditions, or through the law, remain available.

§9 Confidentiality

- (1) The Parties will treat information and knowledge –irrespective its form or format which they obtain in the course of this cooperation contract confidentially. In case of non-avoidable distribution to third parties, they will take care of appropriate protection of confidentiality. Such distribution may in any event only occur for the benefit of this cooperation. No other distribution to third parties is allowed.
- (2) The confidentiality obligation under § 10 (1) of this contract also extends to information and knowledge obtained through discussions and negotiations which took place prior to the entry into force of this contract.
- (3) The confidentiality obligation under § 10 (1) of this contract however does not apply to the following information and knowledge:
 - Published or publicly available information and knowledge;
 - Information and knowledge a Party can prove to have had already;
 - Information and knowledge a Party obtained from a third party, provided the third party did not violate any confidentiality obligations.
- (4) The confidentiality obligation binds the Parties beyond the duration of this contract for three more years.

§10 Liability

- (1) In case of interruption or irregularities in the electricity supply, VRE shall not be liable in so far as it concerns consequences of a disruption in the grid operation, including the grid connection. This sentence does not apply where the interruption results from non-authorized measures of VRE relating to the interruption of supply to IEC.
- (2) In the event of § 10 Abs. 1 of this contract, VRE is obliged to inform IEC upon request and without delay about the facts relating to the damages caused by the grid operator. This obligation shall however only apply where the information is available to VRE, or VRE can be reasonably expected to get such information.
- (3) In all other cases of damages, VRE is liable for intent and culpable negligence in accordance with the terms of the Law. The same applies for actions by VRE's agents. In case of negligent



damages to life, limb or health, liability is also determined by the Law. For negligent material or monetary damages, liability is only incurred in case of violation of a substantial contractual obligation (which gives distinction to the fulfilment of this contract) and is limited to – at the time of the closure of the contract - typical and foreseeable damages.

§11 Force Majeure

(1) The Parties are freed from their contractual obligations under this contract to the extent to which they are unable to meet them due to Force Majeure and no other provisions have been made under this contract.

§12 Transferal of rights

(1) The transferal of the rights and obligations as a whole of one of the Parties to a third party is only valid provided the other Party has beforehand explicitly agreed in writing. Such agreement is not required in case the transferal shall happen to an undertaking within the company structure of the Party transferring its rights in the sense of § 15ff AktG.

§13 Derogatory clause

(1) In the event that one of the clauses of this contract should be or become either invalid or impossible to perform, the other clauses of this contract will not be touched. The Parties will replace the respective provision by a valid provision which can be performed, but which comes as close as possible to the economic result of the provision replaced.

§14 Amendments and additions

- (1) Amendments or additions to this contract need to be done in writing. This includes changes to this clause itself.
- (2) No oral side agreements have been concluded between the Parties.

IFC	VRF



Annex 2: Outline of a Framework Contract for Supply from an on-site VRE Plant

Note: This contract outline is based on German law and legal experience

Note that this model is likely not going to be regarded as self-consumption

Between

The IEC Industry

In the Following: IEC,

and

The VRE production company,

In the Following: VRE,

Together: The Parties,

the following contract will be concluded:

§1 Objective

- (1) The Parties aim to ensure the supply of IEC's electricity demand through the production of the variable renewable energy power plant of ... MW capacity from solar PV/wind energy (Details in Annex 1) constructed, owned and operated by VRE on the site of IEC's industrial property.
- (2) To that end, the Parties agree to cooperate, fulfill their respective obligations and grant each other the respective rights needed as in accordance with this contract.
 - §2 Conduct of the Parties towards each other



- (1) The Parties will make their best efforts to realize this project. They will in particular share all information necessary to make a successful cooperation possible.
- (2) In their business decisions, the Parties will in good faith take into considerations their respective mutual legitimate expectations and will where necessary and appropriate consult each other.

§3 Electricity Supply Contract

- (1) An electricity supply contract will be concluded between the Parties. This contract will govern the electricity supply produced in the variable renewable energy power plant owned by VRE to the IEC. Electricity will under this contract only be supplied as in accordance with the capacity and actual generation of the variable renewable energy power plant owned by VRE. VRE will supply the electricity generated without reserve or balancing electricity and net of own electricity demand.
- (2) IEC is obliged to meet all its electricity demand primarily from the electricity supplied from the variable renewable energy power plant (take or pay). Only where such electricity generation is not sufficient, IEC may buy from a third party. To that end, the Parties agree that IEC may keep another electricity supply contract with
- (3) IEC agrees to adapt its demand profile to the production forecast of VRE. This includes in particular, that IEC will shift its production activities to times of high generation in the variable renewable energy power plant as in accordance with the forecasts provided by VRE.
- (4) VRE is obliged to operate the plant at least ... hours per year at full capacity. Surplus electricity produced in such times of high generation and exceeding IEC's demand will not be taken on and/or compensated by IEC.
- (5) The Parties agree that the price IEC pays for the electricity supplied by VRE under this contract will be at least ...).
- (6) The prices take into account times of high generation and times of low generation, i.e. are variable. The exact prices for the supply of the electricity and the clauses relating to their adaptation are set out in Annex 2, with the conditions of Annex 3 being applicable (Price Sheet VRE, General Terms and Conditions of VREe). Those prices are net prices, which will be applied taxes and surcharges added. Surcharges which find their basis in generally applicable provisions relating to grid use, as set under the relevant legislative framework, are not included and will in case they arise be settled separately.
- (7) ... (Clause to give financial security to VRE for the construction of the plant i.e. ensure that when the same profit ratio as they had in mind when writing the contract will be available when "financial close", thus when they actually sign the financing contracts for the project?)
- (8) The Parties agree that this electricity supply contract shall ensure the economic viability of the variable renewable energy power plant owned by VRE. Such economic viability is given at... return on equity pre-tax Should despite all efforts by the Parties ... not be reached,



- the Parties agree on an increase on the prices to be paid under this electricity supply contract by ...
- (9) The Parties agree that no financial penalties will be applied in case of a delayed start of the electricity supply contract.

§4 Technical specifications relating to the construction of the variable renewable energy power plant

- (1) In close cooperation and coordination with IEC, VRE will construct and operate a variable renewable energy power plant using ... (wind/solar/PV) power with an installed capacity of ... MW. The detailed technical specifications for the variable renewable energy power plant to be constructed and operated by VRE as agreed between the Parties can be found in Annex 1.
- (2) However, in any event, the plant shall meet the following requirements...
 - a. ...
- (3) The variable renewable energy power plant will be located in accordance with the plans attached in Annex 1.
- (4) In the event that changes to the original plans as attached in Annex 1 should become necessary, the Parties will in good faith discuss such changes and try to find an agreeable solution...

§5 Contract on access and use of VRE's infrastructure

- (1) The Parties will conclude a contract under which VRE is obliged to build and maintain the appropriate infrastructure connecting the variable renewable energy power plant to the respective connection point at it IEC's industrial site to which the electricity shall be supplied. Such infrastructure shall include in particular appropriate metering facilities allowing actual and timely consumption information. ... (Exact definition of the connection)
- (2) Such infrastructure shall include in particular appropriate metering facilities allowing actual and timely production and consumption information. It shall at least cover...

a.

- (3) VRE will grant IEC the right to access and use such infrastructure as in accordance with the electricity supply contract mentioned in § 3 of this contract. However, such right to access and use of the infrastructure will not be limited to supply only by VRE but will apply without any discrimination towards other electricity suppliers.
- (4) VRE will not charge IEC any costs for constructing and maintaining the infrastructure. Neither will any costs for reserve or balancing electricity be passed on to IEC.
 - §6 Contract on access and use of IEC's industrial property



- (1) The Parties will fix the right for VRE to access and use IEC's industrial property in so far as it is necessary for the construction and operation of the variable renewable energy power plant in a separate contract.
- (2) This contract will also regulate the registration of a limited personal servitude for at least the time of operation of the variable renewable energy power plant. Should such servitude not suffice for getting financing for the project, the Parties will discuss an alternative solution.
- (3) After the termination of the electricity supply contract, VRE will be in charge of removing any legacy issues stemming from the variable renewable energy power plant.

§7 Time frame for the construction and operation of the variable renewable energy power plant

- (1) In close cooperation and coordination with IEC, VRE will start with the construction of ...
- (2) The variable renewable energy power plant shall go into operation no later than...
- (3) Once the construction is completed and the operation has started, VRE will at all times during the duration of this contract maintain the variable renewable energy power plant and ensure its proper functioning. ...

§8 Duration of this contract

- (1) This contract enters into force at the day of signature by both IEC and VRE.
- (2) This contract is concluded for indefinite time. It can be terminated by either Party through registered mail by the end of each year, thereby respecting a two-year termination period. However, it cannot be terminated earlier than 15 years after the variable renewable energy power plant went into operation and first supplied electricity to IEC under the electricity supply contract in accordance with § 3 of this contract.
- (3) Under the presumption that the variable renewable energy power plant goes into operation and starts supply the ..., the earliest date for termination of this contract would thus be
- (4) In case IEC sells the property, the buyer shall be obliged to take on the rights and obligations of IEC under this contract.

§9 Option to purchase the variable renewable energy power plant

- (1) After the termination of this contract, IEC holds the right to purchase the variable renewable energy power plant. However, IEC is not obliged to purchase the installation. The Parties agree that in such event an expert opinion on the value will determine the price and that they will share the costs for such an opinion.
- (2) The option shall include the infrastructure built and maintained by VRE to ensure the electricity supply to IEC under § 5 of this contract.



(3) In such case that IEC exercises this purchase-option, VRE is freed from its obligation to remove the residual issues of the variable renewable power plant under § 6 (3) of this contract.

§10 General Terms and Conditions

Where and in so far Parties have not deviated from them in this contract, VRE's General Terms and Conditions are applicable.

§11 Confidentiality

- (1) The Parties will treat information and knowledge —irrespective its form or format which they obtain in the course of this cooperation contract confidentially. In case of non-avoidable distribution to third parties, they will take care of appropriate protection of confidentiality. Such distribution may in any event only occur for the benefit of this cooperation. No other distribution to third parties is allowed.
- (2) The confidentiality obligation under§ 10 (1) of this contract also extends to information and knowledge obtained through discussions and negotiations which took place prior to the entry into force of this contract.
- (3) The confidentiality obligation under § 10 (1) of this contract however does not apply to the following information and knowledge:
 - Published or publicly available information and knowledge;
 - Information and knowledge a Party can prove to have had already;
 - Information and knowledge a Party obtained from a third party, provided the third party did not violate any confidentiality obligations.
- (4) The confidentiality obligation binds the Parties beyond the duration of this contract for three more years.

§12 Force Majeure

(1) The Parties are freed from their contractual obligations under this contract to the extent to which they are unable to meet them due to Force Majeure and no other provisions have been made under this contract.

§13 Transferal of rights

(1) The transferal of the rights and obligations as a whole of one of the Parties to a third party is only valid provided the other Party has beforehand explicitly agreed in writing. Such agreement is not required in case the transferal shall happen to an undertaking within the company structure of the Party transferring its rights in the sense of § 15ff AktG.



(2) The Parties agree already to a transferal of rights arising from this contract to the financing banks and will if necessary confirm this in writing.

§14 Economic viability clause

- (1) Should circumstances arise during the term of this contract which significantly affect the economic or legal consequences of this contract but which have not been regulated or which have not been thought of at the time of the conclusion of this contract, the Parties will try to deal with those circumstances in good faith.
- (2) The Party who invokes such circumstances has to state and prove the necessary facts.

§15 Derogatory clause

(1) In the event that one of the clauses of this contract should be or become either invalid or impossible to perform, the other clauses of this contract will not be touched. The Parties will replace the respective provision by a valid provision which can be performed, but which comes as close as possible to the economic result of the provision replaced.

§16 Amendments and additions

(1) Amendments or additions to this contract need to be done in writing. This includes changes to this clause itself.

IEC	VRE	

No oral side agreements have been concluded between the Parties.



Annex 3: Outline of a Framework Contract for Supply from an on-site VRE Plant (self-consumption case) - based on German law and legal experience

Note: This contract outline is based on German law and legal experience

Note that this model might still fall under self-consumption

Between

The IEC Industry

In the Following: IEC,

and

The VRE production company,

In the Following: VRE,

Together: The Parties,

the following contract will be concluded:

§1 Objective

- (1) The Parties aim to ensure the supply of IEC's electricity demand through the production of the variable renewable energy power plant of ... MW capacity from solar PV/wind energy (Details in Annex 1) located on the site of IEC's industrial property.
- (2) The variable renewable energy power plant shall be used for "self-consumption" in the



- sense of § 5 Nr. 12 of the German Renewable Energy Act (Erneuerbare Energien Gesetz, EEG 2014).
- (3) To that end, the Parties agree to cooperate, fulfill their respective obligations and grant each other the respective rights needed as in accordance with this contract.

§2 Conduct of the Parties towards each other

- (1) The Parties will make their best efforts to realize this project. They will in particular share all information necessary to make a successful cooperation possible.
- (2) In their business decisions, the Parties will in good faith take into considerations their respective mutual legitimate expectations and will where necessary and appropriate consult each other.

§3 Electricity Supply Contract

- (1) An electricity supply contract will be concluded between the Parties. This contract will govern the supply with electricity produced in the variable renewable energy power plant owned by VRE to IEC. Electricity will under this contract only be supplied as in accordance with the capacity and actual generation of the variable renewable energy power plant owned by VRE. VRE will supply the electricity generated without reserve or balancing electricity and net of own electricity demand.
- (2) IEC is obliged to take on all the electricity produced by the variable renewable energy power plant (take or pay). Only where such electricity generation is not sufficient, IEC may buy from a third party. To that end, the Parties agree that IEC may keep another electricity supply contract with
- (3) IEC may market surplus electricity produced by the variable renewable energy power plant freely and without having to let VRE share in any income potentially generated that way.
- (4) VRE is obliged to operate the plant at least ... hours per year at full capacity and to make all electricity produced available to IEC.
- (5) In order to allow IEC adapting consumption, i.e. production activities, to the production of the variable renewable energy plant, VRE shall provide IEC with weekly and daily forecasts, the template for which can be found in Annex 4. Further, VRE shall at any time answer all questions relating to the production and forecast to IEC.
- (6) The Parties agree that the price IEC pays VRE at least the fixed amount of ... per month for the supply with electricity from the variable renewable energy plant. ... (Note: in order to come in the "self-consumption" definition, this should be something like a flat rate, putting the risk on IEC, not on VRE).
- (7) ... (Clause to give financial security to VRE for the construction of the plant i.e. ensure that when the same profit ratio as they had in mind when writing the contract will be available



when "financial close", thus when they actually sign the financing contracts for the project)

- (8) The Parties agree that this electricity supply contract shall ensure the economic viability of the variable renewable energy power plant owned by VRE. Such economic viability is given at... return on equity pre-tax Should despite all efforts by the Parties ... not be reached, the Parties agree on an increase on the monthly compensation under the electricity supply contract by ...
- (9) The Parties agree that no financial penalties will be applied in case of a delayed start of the electricity supply contract.

§4 Liability under the electricity supply contract

- (1) The Parties agree that VRE shall not be liable for any costs arising for IEC relating to the production of the variable renewable energy power plant itself, e.g. as production is lower than expected or higher than expected, and thus deficits have to be bought on the market or surpluses need to be sold.
- (2) VRE shall however be liable for damages in this context where they arise from intent or culpable negligence, as in accordance with the Law. The same applies for actions by VRE's agents. In case of negligent damages to life, limb or health, liability is also determined by the Law. For negligent material or monetary damages, liability is only incurred in case of violation of a substantial contractual obligation (which gives distinction to the fulfilment of this contract) and is limited to at the time of the closure of the contract typical and foreseeable damages.

§5 Technical specifications relating to the construction of the variable renewable energy power plant

- (1) In close cooperation and coordination with IEC, VRE will construct and operate a variable renewable energy power plant using ... (wind/solar/PV) power with an installed capacity of ... MW. The detailed technical specifications for the variable renewable energy power plant to be constructed and operated by VRE as agreed between the Parties can be found in Annex 1.
- (2) However, in any event, the plant shall meet the following requirements...
 - a.)...
- (3) The variable renewable energy power plant will be located on IEC's industrial property, and in direct spatial proximity to IEC's industrial plants where the electricity is supposed to be consumed. The location will allow for the supply of electricity without using the public grid. A map can be found in the plans attached in Annex 1.
- (4) In the event that changes to the original plans as attached in Annex 1 should become necessary, the Parties will in good faith discuss such changes and try to find an agreeable solution.



§6 Specifications relating to the operation of the variable renewable energy power plant

- (1) At the latest when the variable renewable energy power plant becomes operational and starts supplying electricity to IEC, VRE will hand over a key to IEC. IEC may access the variable renewable energy power plant at all times, and without having to ask VRE for permission.
- (2) All relevant decisions relating to the operation of the variable renewable energy power plant shall be submitted to IEC for final approval. The Parties will develop a communication procedure in this regard for their mutual convenience.

§7 Contract on access and use of IEC's infrastructure

- (1) The Parties will conclude a contract under which IEC is obliged to build and maintain the appropriate infrastructure⁴⁹ connecting the variable renewable energy power plant to the respective connection point at it IEC's industrial site to which the electricity shall be supplied. ... (Exact definition of the connection) ⁵⁰
- (2) Such infrastructure shall include in particular appropriate metering facilities allowing actual and timely production and consumption information. It shall at least cover

a. ...

- (3) IEC will grant VRE the right to access and use such infrastructure for the supply of electricity to IEC as in accordance with the electricity supply contract mentioned in § 3 of this contract. However, such right to access and use of the infrastructure will not be limited to supply only by VRE but will apply without any discrimination towards other electricity suppliers. 52
- (4) IEC will not charge VRE any costs for constructing and maintaining the infrastructure. Neither will any costs for reserve or balancing electricity be passed on to VRE. 53
- (5) In the alternative to marketing any surpluses, IEC may decide to regulate down the variable renewable energy power plant. VRE shall in this respect act in accordance with IEC's orders. VRE is not owed any compensation but the monthly compensation as in accordance with § 3 of this contract.

⁵³ In order to keep it a "Kundenanlage "it needs to be free of charge, and one should try to avoid using the term grid. If not a Kundenanlage or direct line, it would mean that full grid regulation applies – to be avoided. .



⁴⁹ IEC also pays for the infrastructure of the plant- which takes some costs and risk away from VRE and gives IEC more "control" to make it possibly "self-consumption"

⁵⁰ This could be a "direct line «only to IEC or a "Kundenanlage "which is connected to the grid via a common meter and could have more lines on IEC property, e.g. if IEC has more than one production unit on the property.

For Kundenanlagen, i.e. grids not regulated, no charges may be asked for – charging fees could even be seen as making the grid "public" and thus subject to regulation.

⁵² Again, for keeping this a "Kundenanlage" in case it is not a direct line, it needs to be accessible without discrimination – in practice not a problem, as normally IEC should be connected to the public grid through an own connection point.

§8 Contract on access and use of IEC's industrial property

- (1) The Parties will fix the right for VRE to access and use IEC's industrial property in so far as it is necessary for the construction and management of the variable renewable energy power plant in a separate contract.
- (2) This contract will also regulate the registration of a limited personal servitude ⁵⁴for at least the time of planned operation of the variable renewable energy power plant. Should such servitude not suffice for getting financing for the project, the Parties will discuss an alternative solution.
- (3) After the termination of the electricity supply contract, VRE will be in charge of removing any legacy issues stemming from the variable renewable energy power plant.

§9 Time frame for the construction and operation of the variable renewable energy power plant

- (1) In close cooperation and coordination with IEC, VRE will start with the construction of ...
- (2) The following steps are agreed:

a)...

- (3) The variable renewable energy power plant shall go into operation no later than ...
- (4) Once the construction is completed and the operation has started, VRE will at all times during the duration of this contract maintain the variable renewable energy power plant and ensure its proper functioning.
- (5) The operation of the variable renewable power plant is scheduled to cover at least 15 years.

§10 Duration of this contract

- (1) This contract enters into force at the day of signature by both IEC and VRE.
- (2) This contract is concluded for indefinite time. It can be terminated by either Party through registered mail by the end of each year, thereby respecting a two-year termination period. However, it cannot be terminated earlier than 15 years after the variable renewable energy power plant went into operation and first supplied electricity to IEC under the electricity supply contract in accordance with § 3 of this contract.

⁵⁴ This is a specificity under German law: It basically allows VRE to use the property of IEC for free for some time and relating to the project. It has to be registered since it is vested on the property, and under German law, what is built on the property will become part of the property, normally (exceptions like "Scheinbestandteil" meaning, are only provided for in case the installation is clearly constructed only for a limited time and intended to be removed – not easily the case for such a power plant) Further, there is a protection e.g. if IEC sells the property, the servitude will remain and VRE will have the same right to use it under any new owner.



- (3) Under the presumption that the variable renewable energy power plant goes into operation and stars supply the ..., the earliest date for termination of this contract would thus be
- (4) In case IEC sells the property, the buyer shall be obliged to take on the rights and obligations of IEC under this contract.

§11 Option to purchase the variable renewable energy power plant

- (1) After the termination of this contract, IEC holds the right to purchase the variable renewable energy power plant. The Parties agree that in such event an expert opinion on the value will determine the price and that they will share the costs for such an opinion. However, IEC is not obliged to purchase the installation⁵⁵.
- (2) In such case that IEC exercises this purchase-option, VRE is freed from its obligation to remove the residual issues of the variable renewable power plant under § 6 (3) of this contract.

§12 Liability

- (1) The Parties agree that VRE shall not be liable for any costs arising for IEC relating to the production of the variable renewable energy power plant itself, e.g. as production is lower than expected or higher than expected, and thus deficits have to be bought on the market or surpluses need to be sold.
- (2) VRE shall however be liable for damages in this context where they arise from intent or culpable negligence, as in accordance with the Law. The same applies for actions by VRE's agents. In case of negligent damages to life, limb or health, liability is also determined by the Law. For negligent material or monetary damages, liability is only incurred in case of violation of a substantial contractual obligation (which gives distinction to the fulfilment of this contract) and is limited to at the time of the closure of the contract typical and foreseeable damages.

§13 General Terms and Conditions

Where and in so far Parties have not deviated from them in this contract, IEC's General Terms and Conditions are applicable.

§14 Confidentiality

(1) The Parties will treat information and knowledge -irrespective its form or format - which

Alternative would be "silence" or a speaking clause, such as that after the termination of this contract, the parties will in good faith negotiate on the further use or removal of the installation...



of the deal and needs to be considered in the context of damages in case of early termination of the contract, or in the course of VAT – meaning e.g. that one might find that VRE would have to pay full VAT on the basic price plus the price it may get when IEC buys the plant – that could lead to financing problems.

they obtain in the course of this cooperation contract confidentially. In case of non-avoidable distribution to third parties, they will take care of appropriate protection of confidentiality. Such distribution may in any event only occur for the benefit of this cooperation. No other distribution to third parties is allowed.

- (2) The confidentiality obligation under§ 10 (1) of this contract also extends to information and knowledge obtained through discussions and negotiations which took place prior to the entry into force of this contract.
- (3) The confidentiality obligation under § 10 (1) of this contract however does not apply to the following information and knowledge:
 - Published or publicly available information and knowledge;
 - Information and knowledge a Party can prove to have had already;
 - Information and knowledge a Party obtained from a third party, provided the third party did not violate any confidentiality obligations.

The confidentiality obligation binds the Parties beyond the duration of this contract for three more years.

§15 Force Majeure

(1) The Parties are freed from their contractual obligations under this contract to the extent to which they are unable to meet them due to Force Majeure and no other provisions have been made under this contract.

§16 Transferal of rights

- (1) The transferal of the rights and obligations as a whole of one of the Parties to a third party is only valid provided the other Party has beforehand explicitly agreed in writing. Such agreement is not required in case the transferal shall happen to an undertaking within the company structure of the Party transferring its rights in the sense of § 15ff (German Shareholding Law- AktG.
- (2) The Parties agree already to a transferal of rights arising from this contract to the financing banks and will if necessary confirm this in writing.

§17 Economic viability clause

- (1) Should circumstances arise during the term of this contract which significantly affect the economic or legal consequences of this contract but which have not been regulated or which have not been thought of at the time of the conclusion of this contract, the Parties will try to deal with those circumstances in good faith.
- (2) The Party who invokes such circumstances has to state and prove the necessary facts.



§18 Derogatory clause

(1) In the event that one of the clauses of this contract should be or become either invalid or impossible to perform, the other clauses of this contract will not be touched. The Parties will replace the respective provision by a valid provision which can be performed, but which comes as close as possible to the economic result of the provision replaced.

§19 Amendments and additions

- (1) Amendments or additions to this contract need to be done in writing. This includes changes to this clause itself.
- (2) No oral side agreements have been concluded between the Parties.

IFC	VRF



Annex 4: Outline of a Framework Contract for the Construction and Management of a VRE for an industrial production facility

Note: This contract outline is based on German law and legal experience

between

The IEC Industry

In the following: IEC,

and

The VRE production company,

in the following: VRE,

together "the Parties",

the following contract will be concluded:

§1 Objective

- (1) The Parties aim to ensure the supply of IEC's electricity demand through a variable renewable energy power plant to be constructed on IEC's industrial property.
- (2) The variable renewable energy power plant shall be developed and constructed by VRE for IEC.
- (3) The variable renewable energy power plant shall thereafter be used for "self-consumption" in the sense of § 5 Nr. 12 of the German Renewable Energy Act (Erneuerbare Energien Gesetz, EEG 2014).
- (4) VRE shall manage the operation of the plant for IEC through providing technical and IT-



equipment, as well as trained staff in order to obtain optimal efficiency. In particular, VRE shall assist IEC with shifting production processes to hours of high generation in the variable renewable energy power plant and reducing energy consumption at hours of little generation in the variable renewable energy power plant, in order to allow IEC to have almost all its energy consumption met by the supply of the own variable renewable energy power plant. ⁵⁶

§2 Conduct of the Parties towards each other

- (1) The Parties will make their best efforts to realize this project. They will in particular share all information necessary to make a successful cooperation possible.
- (2) In their business decisions, the Parties will in good faith take into considerations their respective mutual legitimate expectations and will where necessary and appropriate consult each other.

§3 Contract on the delivery of a variable renewable energy power plant

- (1) The Parties will conclude a contract for the delivery of a variable renewable energy power plant. Under this contract, VRE will deliver a variable renewable energy power plant, fit for operation, and in accordance with the technical specifications agreed between the Parties.
- (2) Delivery will include all permits needed for the plant to be constructed and operated.
- (3) Delivery will also include all materials needed for the construction of the plant, the ground works and the connection of the plant. In particular, VRE will...
 - a) ...
- (4) VRE will use own equipment and staff or will rent or hire such under own responsibility.
- (5) For the delivery, VRE has to hand over to IEC the keys to the variable renewable energy power plant. However, delivery will be completed only when the variable renewable energy power plant is fully operational and supplies IEC with electricity through the appropriate infrastructure. ⁵⁷

Under German law, everything installed on the property automatically comes to be part of the property, so that IEC is the owner. However, one should define when delivery is completed in order not – in a worst case



⁵⁶ To be noted: In Germany under § 5 Nr. 12 EEG, for self-consumption the consumer and the operator need to be the same – thus we cannot say that VRE operates the plant – however, it should be possible that VRE assists in the operation, i.e. as kind of a service contract for the operation.

It is important though, that the economic risks in such scenario all remain with IEC and that IEC is "in control" To be agreed when exactly delivery will happen.

§4 Technical specifications

- (1) The variable renewable energy power plant to be delivered by VRE under the delivery contract will be a ... (wind/solar/PV) power plant with ... MW capacity. The detailed technical specifications for the variable renewable energy power plant to be constructed and operated by VRE as agreed between the Parties can be found in Annex 1.
- (2) However, in any event, the plant shall meet the following requirements...
 - a))...
- (3) The variable renewable energy power plant will be located on IEC's industrial property, and in direct spatial proximity to IEC's industrial plants where the electricity is supposed to be consumed. The location will allow for the supply of electricity without using the public grid. A map can be found in the plans attached in Annex 1.
- (4) In the event that changes to the original plans as attached in Annex 1 should become necessary, the Parties will in good faith discuss such changes and try to find an agreeable solution. ...⁵⁸

§5 Time frame for the construction of the variable renewable energy power plant

- (1) In close cooperation and coordination with IEC, VRE will start with the construction on... The construction is scheduled to meet the following dates...
 - a١
- (2) The variable renewable energy power plant shall go into operation no later than...
- (3) ...

§6 Price

- (1) For the delivery of the variable renewable energy power plant as in accordance with this contract, IEC will pay ...
- (2) The price includes all the materials as well as the works. It consists of... (possibly set out some details on how the price is calculated/costs/profit margin for VRE etc. Note: some price factors may change and parties may need to agree who bears the risk for such changes)

scenario - have VRE leave with a plant that is half constructed/not in operation/not operational/not connected etc.

Some flexibility is probably needed but as it is a construction to be owned by IEC one should be careful and not give VRE too much discretion here.

A "speaking clause" like this could be used, or a clause that written consent is needed, or a veto right or so...



⁵⁸ The Parties should come up with a solution in case they need to change the original plans.

(3) The price will be paid in installments, according to the following schedule...

a) ...

§7 Service Agreement on the management of the variable renewable energy power plant

- (1) The Parties will conclude a service agreement on the management of the variable renewable energy power plant owned by IEC.
- (2) Under this agreement, VRE will be responsible for ⁵⁹
 - a) Installing appropriate software in order to monitor VRE's energy consumption;
 - b) Monitor IEC energy consumption;
 - c) Monitor the production of the variable renewable energy power plant;
 - d) Assist in the adaptation of supply and demand within IEC's self-consumption;
 - e) Suggest and after approval by IEC implement energy efficiency improvements in IEC's production processes;
 - f) Assist in the negotiation on reduced grid use tariffs;
 - g) Assist in the marketing of surplus energy;
 - h) Assist in the marketing of negative balancing energy;
 - i) ...
- (3) Under this agreement, VRE will act as an agent for IEC. All decisions will need the approval of IEC and VRE will act upon all orders of IEC relating to the above-listed services. IEC will at all times hold the keys to the variable renewable power plant in order to be able to intervene, should such be necessary.

§ 8 Payment for the management

(1) Under the service agreement on the management of the variable renewable energy power plant, IEC will pay VRE a monthly rate of ... (Note: VRE is paid only a management fee, i.e. all the risk on the operation of the plant stays with IEC to keep this a self-consumption scenario.)

So, depending on what IEC can offer and what VRE can actually do, one could have different options here, including energy efficiency measures.



⁵⁹ This is just an exemplary enumeration: Several things are possible here – and should be regulated in detail in a separate agreement – however, it is important, that VRE is not "operator" in own name and for own responsibility, as otherwise this would not be "Eigenversorgung" anymore.

- (2) Such payment includes the maintenance costs of the own equipment and the salaries of the own staff VRE uses.
- (3) The payment neither includes any maintenance costs relating to the variable renewable energy power plant owned by IEC, nor any maintenance costs relating to the maintenance of IEC's property in general. However, upon approval by IEC, VRE shall perform maintenance works on the variable renewable energy power plant, and may charge the costs arising from this separately.

§9 Access to the property

- (1) IEC will grant VRE access to its industrial property, such as required in order to construct the variable renewable energy power plant in accordance with this contract.
- (2) After the construction has been completed, IEC will grant VRE access to its industrial property, such as required in order to manage the variable renewable energy power plant in accordance with the this contract and the terms of the respective service agreement.
- (3) Access shall be free of charge.

§10 Liability

- (1) The Parties agree that VRE shall not be liable for any costs arising for IEC relating to the production of the variable renewable energy power plant itself, e.g. as production is lower than expected or higher than expected, and thus deficits have to be bought on the market or surpluses need to be sold.
- (2) VRE shall however be liable for damages in this context where they arise from intent or culpable negligence, as in accordance with the Law. The same applies for actions by VRE's agents. In case of negligent damages to life, limb or health, liability is also determined by the Law. For negligent material or monetary damages, liability is only incurred in case of violation of a substantial contractual obligation (which gives distinction to the fulfilment of this contract) and is limited to at the time of the closure of the contract typical and foreseeable damages.

§11 General Terms and Conditions

Where and in so far Parties have not deviated from them in this contract, VRE's General Terms and Conditions are applicable.

§12 Duration of this contract

- (1) This contract enters into force at the day of signature by both IEC and VRE.
- (2) It is concluded for ... (Note: The contract should last longer at least than what is scheduled for the delivery of the plant. In the Service Contract one could fix durations for that, with annual/bi-annual renewal etc. possibilities, but the Framework should definitely apply over a



longer period.)

- (3) Termination of this contract is possible upon six months' notice, to be send by registered mail. However, no termination shall be possible prior to the delivery of the variable renewable energy power plant under this contract.
- (4) Termination does not require any reasons. However, in case of termination for no valid reason, the other party shall be entitled to a compensation payment. Such payment shall be... (Note: Best to have specified a sum here as in case of early termination a compensation obligation may arise, but it might be difficult for a court to estimate the value of the service of VRE to IEC?)

§13 Confidentiality

- (1) The Parties will treat information and knowledge –irrespective its form or format which they obtain in the course of this cooperation contract confidentially. In case of non-avoidable distribution to third parties, they will take care of appropriate protection of confidentiality. Such distribution may in any event only occur for the benefit of this cooperation. No other distribution to third parties is allowed.
- (2) The confidentiality obligation under § 10 (1) of this contract also extends to information and knowledge obtained through discussions and negotiations which took place prior to the entry into force of this contract.
- (3) The confidentiality obligation under § 10 (1) of this contract however does not apply to the following information and knowledge:
 - Published or publicly available information and knowledge;
 - Information and knowledge a Party can prove to have had already;
 - Information and knowledge a Party obtained from a third party, provided the third party did not violate any confidentiality obligations.
- (4) The confidentiality obligation binds the Parties beyond the duration of this contract for three more years.

§14 Force Majeure

(1) The Parties are freed from their contractual obligations under this contract to the extent to which they are unable to meet them due to Force Majeure and no other provisions have been made under this contract.

§15 Transferal of rights

(1) The transferal of the rights and obligations as a whole of one of the Parties to a third party is only valid provided the other Party has beforehand explicitly agreed in writing. Such



- agreement is not required in case the transferal shall happen to an undertaking within the company structure of the Party transferring its rights in the sense of § 15ff AktG.
- (2) The Parties agree already to a transferal of rights arising from this contract to the financing banks and will if necessary confirm this in writing.

§16 Economic viability clause

- (1) Should circumstances arise during the term of this contract which significantly affect the economic or legal consequences of this contract but which have not been regulated or which have not been thought of at the time of the conclusion of this contract, the Parties will try to deal with those circumstances in good faith.
- (2) The Party who invokes such circumstances has to state and prove the necessary facts.

§17 Derogatory clause

(1) In the event that one of the clauses of this contract should be or become either invalid or impossible to perform, the other clauses of this contract will not be touched. The Parties will replace the respective provision by a valid provision which can be performed, but which comes as close as possible to the economic result of the provision replaced.

§18 Amendments and additions

- (1) Amendments or additions to this contract need to be done in writing. This includes changes to this clause itself.
- (2) No oral side agreements have been concluded between the Parties.

,	
IEC	VRE

