



# CertifHy Scheme

**Dissemination level: public**

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## Status of this document

The CertifHy Scheme document was formally approved by the CertifHy Stakeholder Platform on 28 April 2022.

The effective date of this CertifHy Scheme document is 29 April 2022.

## Change History

Version	Date	Description
0.1	2018-02-09	Very first working draft
0.2	2018-02-21	First working draft
0.3	2018-03-22	Working draft
0.4	2019-01-25	Revised working draft
0.5	2019-02-14	Revised working draft after WG1 and WG2 consultation
0.6	2019-02-21	CertifHy WG1 endorsed
1.0	2019-03-11 2019-03-25	CertifHy Steering Group endorsed CertifHy Stakeholder Platform endorsed
1.1	2021-08-09	Adjustment to EECS requirements
1.2	2022-03-23	CertifHy WG1 endorsed
1.3	2022-04-19	Further adjustments to EECS and ISO 14067; CertifHy WG1 endorsed
1.4	2022-04-27	CertifHy Steering Group endorsed
2.0	2022-04-28	CertifHy Stakeholder Platform endorsed

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# 1 Introduction

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The CertifHy Scheme document governs the CertifHy Scheme - a European Certification Scheme for Hydrogen fulfilling specific criteria. At this stage, this document covers Certificates, and the framework leaves room for additional purposes.

CertifHy will make sure to remain compliant with the EECS rules by adjusting the CertifHy scheme documents to changes of EECS.

## 2 Core Principles

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CertifHy is based upon the following core principles:

### 2.1 Uniqueness

No more than one CertifHy Certificate or any other transferable certificate with a purpose of disclosure of sustainability attributes shall be Issued and subsequently Cancelled in respect of the same unit of Hydrogen Output in order to avoid any potential double counting. A Certificate shall only be Issued in respect of Hydrogen Output which has not been and is not being otherwise Disclosed.

Duplication of the same Certificate shall be avoided over its whole life cycle.

The attributes of an amount of Hydrogen can only be claimed through cancellation of the corresponding Certificate.

### 2.2 Transparency

Participation in CertifHy should be based on objective and publicly disclosed criteria so as to achieve fair and open access to CertifHy.

Access to details of CertifHy Certificates should be made available to CertifHy Account Holders.

### 2.3 Immutability

The CertifHy Certificate data shall not change in any way once a CertifHy Certificate has been properly Issued, except to indicate that it has Expired or been Cancelled. Re-bundling and re-labelling of Certificates to produce derivatives shall not be allowed.

### 2.4 Ownership of CertifHy Certificates

The Account Holder of an Account shall be treated as the owner of the CertifHy Certificates in that Account.

### 2.5 Operational reliability

Operational risks arising in the Issue, Transfer and Cancellation processes for CertifHy Certificates should be identified and mitigated through the development of appropriate systems, controls and procedures.

Systems should be reliable and secure, and have adequate capacity.

Contingency plans and backup facilities should be established to allow for timely recovery of records and operations and completion of the transfer process.

Records which are sufficient to enable resolution of disputes relating to such matters as ownership of and eligibility for Certificates should be kept of all material communications between Issuing Bodies and Account Holders regarding the registration of Production Devices and the Issue, Transfer and Cancellation of Certificates.

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## 2.6 End of life

Every CertifHy Certificate is subject to an ending lifetime. Details are defined in procedure 1.4.

## 2.7 Consumption period

Physical Hydrogen consumption for which the CertifHy Certificates are cancelled shall be between the beginning of the production batch, on which the CertifHy Certificates are based, and the cancellation date of the Certificates.

## 2.8 Rectification

The Rules and criteria to be met with respect to the obligations of an Account Holder in respect of the errors or inaccuracies of a CertifHy Certificate are defined within the latest EECS Rules.

## 2.9 Disputes

Disputes in relation to the AIB will be dealt with in accordance with the latest EECS Rules.

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### 3 CertifHy Goal and Mission

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CertifHy's mission is to advance and facilitate the production, procurement, and use of Hydrogen fulfilling ambitious environmental criteria in order to protect the climate and improve the living conditions of humankind.

CertifHy wants to contribute to and promote an environmentally, socially and economically sustainable production of Hydrogen in all uses including energy, mobility, chemical conversion, etc.

In order to achieve this, CertifHy has established a high-quality European Certificate scheme covering the entire upstream supply chain to the production device exit gate at defined quality and providing the framework for ensuring transparent information. It was established and is continuously reviewed and improved by means of a multi-stakeholder dialogue.

Openness, reliability, integrity, quality and transparency are core features of the CertifHy scheme and are fundamental for CertifHy's relationship with its stakeholders.

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## 4 Scope and Normative References

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### 4.1 Geographic scope

CertifHy covers the European Union plus the European Economic Area plus Switzerland. Issuing of CertifHy Certificates for production devices outside this geographical scope is not possible. Cancellation of CertifHy Certificates for Hydrogen uses outside this geographical scope is not possible.

### 4.2 Technologies

The CertifHy scheme is technology neutral as long as the requirement to comply with the definitions is met.

Any technology that can provide evidence that the defined requirements for the amount of Hydrogen produced are met are included in the scope of the CertifHy scheme.

In addition to designated Hydrogen production technologies, the technologies producing Hydrogen as by-product are included in the CertifHy scope as far as transparent and unambiguous information about the main product is included in the Certificate and the basis of the GHG emissions allocation complies with the principles of the CertifHy scheme.

### 4.3 Applications

The CertifHy Scheme shall be open to all kinds of applications including energy, mobility, chemical conversion, etc.



## 5 Definition of Terms

Term	Definiton
Account	An Account in the CertifHy Registry being either a Transferables Account or a Cancellation Account;
Account Holder	A person in respect of whom an Account is maintained on the CertifHy Registry
Cancel / Cancellation	Means to remove a CertifHy Certificate from a Transferables Account at the request of an Account Holder for the purposes of enabling the Account Holder (whether on its own behalf or on behalf of another person): (a) to realise such real or intangible benefits as may be accorded to it; and/or (b) to comply with a legal obligation; (and Cancellation shall be construed accordingly)
Cancellation Account	A record on the CertifHy Registry relating to a particular person incorporating CertifHy Certificates which have been Cancelled by that person, or which have been transferred to that person in connection with their Cancellation by another Account Holder;
Cancellation Statement	A non-transferable electronic or printed receipt for providing evidence of the attributes of an amount of Hydrogen at the time of Cancellation of CertifHy Certificates acquired by an Account Holder;
CertifHy	The European Hydrogen environmental Certificate scheme provided by the CertifHy Stakeholder Platform
CertifHy Certificate	An electronic document which provides proof that a given quantity of Hydrogen was produced by a registered production device with a specific quality and method of production and which is maintained on a CertifHy Registry
CertifHy Registry	A database operated either by the CertifHy Stakeholder Platform or by a third party on its behalf, comprising: a) Accounts and the Certificates in those Accounts; b) details of Production Devices and information provided to the Issuing Body in connection with the registration of those Production Devices
CertifHy Registration Database (Registry)	A database operated by CertifHy, or operated by a Registry Operator on behalf of CertifHy, for the purposes of EECS, comprising: (a) Transferables and Cancellation Accounts and the CertifHy Certificates in those Accounts;

	<p>(b) details of Production Devices and information provided to CertifHy or its Registry Operator in connection with the registration of those Production Devices with CertifHy or the Registry Operator; and</p> <p>(c) details of CertifHy Certificates which have been transferred out of that CertifHy Registration Database</p>
CertifHy Stakeholder Platform	The stakeholder platform established under <i>FCH Contract 190</i> from the Fuel Cells and Hydrogen 2 Joint Undertaking
Certification Body	<p>An approved organisation which is independent of the Registrant and whose role it is to</p> <p>a) carry out a Production Batch Audits, and</p> <p>b) carry out Production Device Audits</p>
Competent Authority	In relation to the exercise or discharge of any rule making or administrative function with respect to the CertifHy Domain, the body to exercise or discharge that function, and, in relation to the CertifHy Certificate the body to issue that Certificate.
Consumption Declaration	A declaration of the Core Energy Inputs required to produce Hydrogen Output in the Production Batches for which Issuing of Certificates is requested.
Core Energy Input	Energy Input used to generate the hydrogen molecules composing the Hydrogen.
Disclosure	The process whereby a supplier provides to its customers information about Hydrogen that has been supplied to them
Domain	An area containing Production Devices with respect to which a Member is an Authorised Issuing Body for the purposes of a CertifHy Product;
Expiry	The prevention by the Issuing Body on whose CertifHy Registration Database a CertifHy Certificate resides of transfer to another Transferables Account and Cancellation of such CertifHy Certificate by the holder as a consequence of the passage of a given period of time since its Issue or since the production of the associated energy;
Hydrogen	An Energy Carrier consisting of dihydrogen molecules (H <sub>2</sub> ) having a defined purity and pressure.

Input	An amount of a product, material or energy consumed by a Production Device.
Issue / Issuing	The process of creating a CertifHy Certificate in a Transferables Account in the CertifHy Registry
Issue Request	A request by the operator of a Production Device to an Issuing Body for the Issue of CertifHy Certificates, in respect of a particular Production Batch
Issuing Body	An organisation formally authorised by the CertifHy Stakeholder Platform to issue CertifHy Certificates within a specified country or region.
Hydrogen Output	An amount of Hydrogen yielded by a Production Device.
Production Batch	Hydrogen Output produced by a specific Production Device within a specific period of time
Production Batch Audit	An independent validation of Production Batches carried out by a Certification Body
Production Device	A separately measured device or group of devices that produces a Hydrogen Output
Production Device Audit	An independent verification of Production Device characteristics carried out by a Certification Body
Registrant	A person or organisation in whose name a Production Device is registered in the CertifHy Registry for the purposes of the Issue of CertifHy Certificates
Subsidiary Document	A document designated as such by any provision of the CertifHy Scheme and published in accordance with the provisions thereof
Transferables Account	<p>A record on the CertifHy Registry relating to a particular person incorporating:</p> <ul style="list-style-type: none"> <li>(a) CertifHy Certificates Issued to that person by the Member operating the CertifHy Registry; and</li> <li>(b) CertifHy Certificates transferred (by notice to the Member operating the CertifHy Registry) by another person;</li> </ul> <p>which in either case have not subsequently:</p> <ul style="list-style-type: none"> <li>(i) been transferred to another Transferables Account on this Registry or another EECS Registration Database;</li> <li>(ii) been Cancelled;</li> <li>(iii) Expired; or</li> <li>(iv) been Withdrawn;</li> </ul>

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Well-to-gate Carbon Footprint of a product	<p>Partial carbon footprint of a product considering all the processes in the product system from extraction of raw materials to the point where the product is made available for transport and supply to users excluding the GHG emissions from capital goods.</p> <p>Also simply referred to as Carbon Footprint</p>
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## 6 Roles & Responsibilities

This section sets out the roles and responsibilities of the following types of actors (see figure below).

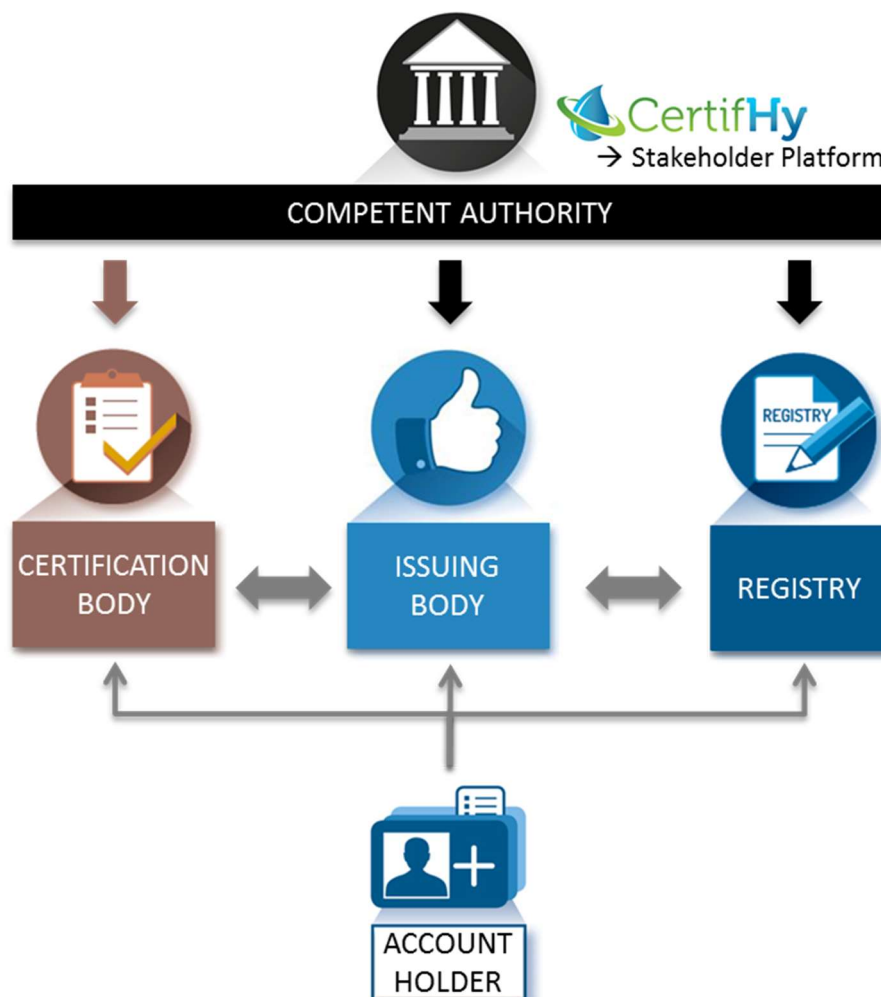


Figure: Roles in CertifHy.

### 6.1 CertifHy Stakeholder Platform

The CertifHy Stakeholder Platform takes the role of the Competent Authority.

It is the role of the CertifHy Stakeholder Platform or a body designated by it to

- endorse the CertifHy scheme document and all subsidiary documents to it,
- decide on the approval of Certification Bodies (procedure P0.3),
- appoint Issuing Bodies.

### 6.2 Certification Body

It is the role of Certification Bodies to

- verify the eligibility of Production Devices through a Production Device Audit in the framework of a contract with the Registrant (procedure P0.2),

- verify the attributes of Production Batches through a Production Batch Audit in the framework of a contract with the Account Holder (procedure P1.1).

## 6.3 Issuing Body

An Issuing Body shall supervise the issuing, transfer and cancellation of CertifHy Certificates. It is the responsibility of an Issuing Body to ensure that all aspects of the CertifHy scheme as defined in this document and all subsidiary documents to it, which are related to the issuing, transfer and cancellation of CertifHy Certificates, are enforced. This includes the supervision of the operation of the CertifHy Registry.

It is the role of an Issuing Body to

- decide on the registration of Account Holders (procedure P0.1),
- decide on the registration of Production Devices (procedure P0.2),
- decide on the issuing of CertifHy Certificates (procedure P1.1),
- verify and satisfy itself, that Certificate transfer requests by Account Holders are valid and all information on the online form for Certificate transfers are accurate (procedure P1.2),
- decide on the cancellation of CertifHy Certificates (procedure P1.3).

## 6.4 Registrant / Account Holder

Registrants / Account Holders have in their Accounts of the CertifHy Registry Production Devices and / or CertifHy Certificates.

It is the responsibility of the account holder to cancel Certificates only against physical Hydrogen consumption that he can ascertain as belonging to the specified Certificate system scope (see chapter 4).

Registrants / Account Holders can

- register accounts with the Issuing Body in the CertifHy Registry (procedure P0.1),
- register Production Devices with the Issuing Body in the CertifHy Registry (procedure P0.2),
- select and contract a Certification Body for the verification of the attributes of Production Batches (procedure P1.1),
- request Certificate issuing from the Issuing Body (procedure P1.1),
- request Certificate transfers from one Account to another to the Issuing Body (procedure P1.2),
- request Certificate cancellation to the Issuing Body (procedure P1.3).

## 7 Certificate Labels and Content

### 7.1 Certificate Labels

The CertifHy scheme includes two different Certificate Labels:

- CertifHy Green Hydrogen (from renewable sources and having a greenhouse gas balance below a defined threshold), and
- CertifHy Low Carbon Hydrogen (having a greenhouse gas balance below a defined threshold).

The criteria for compliance with the two products are defined in the Subsidiary Document CertifHy-SD Hydrogen Criteria.

### 7.2 Certificate Content

Each Certificate shall have a value of 1 MWh based on the lower heating value.

A Certificate shall contain the following information:

PART 1: Factual information	Comments
<ul style="list-style-type: none"> <li>• Account number</li> </ul>	
<ul style="list-style-type: none"> <li>• Identity of the Production Device                             <ul style="list-style-type: none"> <li>○ Production device identifier</li> <li>○ Name</li> <li>○ Location country</li> <li>○ Location city</li> <li>○ Postal code</li> <li>○ Commissioning date</li> <li>○ Installed production capacity</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Date and time of Hydrogen production: beginning and end of the production batch</li> </ul>	dd.mm.yyyy
<ul style="list-style-type: none"> <li>• Fuel (or heat source) and Technology                             <ul style="list-style-type: none"> <li>○ Fuel (or heat source) code(s) (see Annex A) for up to ten fuels including respective share of total fuel input</li> <li>○ Technology code (see Annex B); including main/by-product</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Financial support to Hydrogen production or input fuel production                             <ul style="list-style-type: none"> <li>○ investment supported, and/or</li> <li>○ production supported, and/or</li> <li>○ supported scientific/demo/pilot project, or</li> <li>○ unsupported, or</li> <li>○ no information available</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Share of renewable energy for each input energy carrier for producing the Hydrogen</li> </ul>	%
<ul style="list-style-type: none"> <li>• GHG balance:                             <ul style="list-style-type: none"> <li>○ Well-to-gate Carbon Footprint</li> </ul> </li> </ul>	g CO <sub>2eq</sub> /MJ <sub>H2</sub>

PART 1: Factual information	Comments
<ul style="list-style-type: none"> <li>Certificate identity <ul style="list-style-type: none"> <li>Identifier (the unique number which has been assigned to the Certificate)</li> <li>Issuing date</li> <li>Cancellation/Expiry date</li> <li><i>[Status of the Certificate]</i></li> <li><i>Purpose of Issuing</i></li> </ul> </li> </ul>	ID  dd.mm.yyyy
<ul style="list-style-type: none"> <li>Certification Body</li> </ul>	Name

PART 2: Evaluation of information	Comments
<ul style="list-style-type: none"> <li>CertifHy label: <ul style="list-style-type: none"> <li>CertifHy Green Hydrogen</li> <li>CertifHy Low-Carbon Hydrogen</li> </ul> </li> </ul>	

The Production Batch Audit Report submitted to the Issuing Body by a Certification Body according to procedure P1.1 is stored in the registry together with the CertifHy Certificates covered by that Production Batch Audit Report.

## 7.3 Cancellation Statement

The purpose of the Cancellation Statement is to provide reliable information to final customers about the attributes of the Hydrogen used associated with the cancellation.

The Issuing Body issues Cancellation Statements in respect of the cancellation of CertifHy Certificates to the Account Holder from which the Certificates have been cancelled in accordance with Procedure P1.3.

The Account Holder requesting a Cancellation Statement shall provide information to the Issuing Body about the characteristics of the physical supply of Hydrogen that was actually consumed by the end user.

The Cancellation Statement shall present:

- 1) a statement that it relates to the Cancellation of CertifHy Certificates;
- 2) the account number, name and address of the Account Holder that made the request;
- 3) information about the beneficiary or beneficiaries of this cancellation, being
  - a) the type of the beneficiary, being either “Hydrogen supplier” or “end-consumer”;
  - b) where the beneficiary is a Hydrogen supplier, the identity of the energy supplier or where the beneficiary is an end-consumer, the identity of the end-consumer or end-consumer group;
  - c) the country (and, if known, the location within that country) where the Hydrogen associated with the cancellation is consumed;



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- d) the purpose of the Hydrogen use associated with the cancellation; and
  - e) the brand name of the product associated with this cancellation, if one has been specified in the associated cancellation request;
- 4) a statement that the environmental qualities of the associated Hydrogen have been consumed and that this Cancellation Statement and these CertifHy Certificates may not be transferred to any party;
  - 5) the number of CertifHy Certificates and the identity of each CertifHy Certificate to which the Cancellation Statement relates;
  - 6) the date of producing the Cancellation Statement; and
  - 7) the period during which the associated Hydrogen has been or will be consumed.

When producing a Cancellation Statement, the Issuing Body shall record in the Registry the CertifHy Certificates that are included in that Cancellation Statement, ensuring that each CertifHy Certificate is included in no more than one Cancellation Statement.

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## 8 Procedures

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The following procedures are defined in Subsidiary Documents:

- Procedure 0.1 | Registration of Account Holder
- Procedure 0.2 | Registration of Production Device
- Procedure 0.3 | Certification Body accreditation
- Procedure 1.1 | Certificate Issuing
- Procedure 1.2 | Certificate Transfer
- Procedure 1.3 | Certificate Cancellation
- Procedure 1.4 | Certificate Expiry

## Annex I: Types of Energy Inputs

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
00	Unspecified	00	Unspecified	00	Unspecified	00	Unspecified	F00000000
01	Renewable	00	Unspecified	00	Unspecified	00	Unspecified	F01000000
		01	Solid	00	Unspecified	00	Unspecified	F01010000
				01	Municipal waste	01	Biogenic	F01010101
				02	Industrial and commercial waste	01	Biogenic	F01010201
				03	Wood	00	Unspecified	F01010300
						01	Forestry products	F01010301
						02	Forestry by-products & waste	F01010302
						03	Saw products, by-products and waste	F01010303
				04	Animal Fats	00	Unspecified	F01010400
				05	Biomass from agriculture	00	Unspecified	F01010500
						01	Agricultural products	F01010501
						02	Agricultural by-products & waste	F01010502
		02	Liquid	00	Unspecified	00	Unspecified	F01020000
				01	Municipal biodegradable waste	00	Unspecified	F01020100
				02	Black liquor	00	Unspecified	F01020200
				03	Pure plant oil	00	Unspecified	F01020300
						01	Rapeseed (Brassica napus L.)	F01020301
						02	Sunflower (Helianthus annuus L.)	F01020302

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
						03	Oil palm ( <i>Elaeis guineensis</i> Jacq.)	F01020303
						04	Coconut ( <i>Cocos nucifera</i> L.)	F01020304
						05	Jatropha	F01020305
				04	Waste plant oil	00	Unspecified	F01020400
				05	Refined vegetable oil	00	Unspecified	F01020500
						01	Biodiesel (mono-alkyl ester)	F01020501
						02	Biogasoline (C6-C12 hydrocarbon)	F01020502
				06	Methanol	00	Unspecified	F01020600
				07	Ammonia	00	Unspecified	F01020700
				08	LOHC	00	Unspecified	F01020800
		03	Gaseous	00	Unspecified	00	Unspecified	F01030000
				01	Landfill gas	00	Unspecified	F01030100
				02	Sewage gas	00	Unspecified	F01030200
				03	Agricultural gas	00	Unspecified	F01030300
						01	Pig manure	F01030301
						02	Cow manure	F01030302
						03	Chicken manure	F01030303
						04	Unspecified manure	F01030304
						05	Energy crops	F01030305
						06	Digestion of pure manure	F01030306
						07	Digestion of manure with energy crops	F01030307
				04	Gas from organic waste digestion	00	Unspecified	F01030400
						01	Organic waste unspecified	F01030401
						02	Agricultural waste unspecified	F01030402
						03	Agricultural waste from farm fertiliser	F01030403
						04	Agricultural waste from straw	F01030404
						05	Waste from food industry	F01030405
						06	Manure with organic waste	F01030406

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
						07	Manure with organic waste and energy crops	F01030407
				05	Process gas	01	Biogenic	F01030501
				06	Other biogenic sources	00	Unspecified	F01030601
		04	Heating and cooling	01	Solar	00	Unspecified	F01040100
				02	Geothermal	00	Unspecified	F01040200
						01	Conventional geothermal heat	F01040201
						02	Enhanced dry bed geothermal heat	F01040202
						03	Shallow geothermal heat/cold	F01040203
				03	Aerothermal	00	Unspecified	F01040300
				04	Hydrothermal	00	Unspecified	F01040400
						01	River	F01040401
						02	Lake	F01040402
				05	Process heat	01	Biogenic	F01040501
		05	Mechanical source or other	00	Unspecified	00	Unspecified	F01050000
				01	Wind	00	Unspecified	F01050100
				02	Hydro & marine	00	Unspecified	F01050200
		06	Electric	00	Unspecified	00	Unspecified	F01060000
				01	Solar	00	Unspecified	F01060100
						01	Photovoltaic	F01060101
						02	Concentration	F01060102
				02	Wind	00	Unspecified	F01060200
						01	Onshore	F01060201
						02	Offshore	F01060202
				03	Hydro-electric installation	00	Unspecified	F01060300
						01	Run-of-river head installation	F01060301
						02	Storage head installation	F01060302
						03	Pure pumped storage head installation	F01060303
						04	Mixed pumped storage head	F01060304

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
				04	Marine	00	Unspecified	F01060400
						01	Tidal	F01060401
						02	Wave	F01060402
						03	Currents	F01060403
						04	Pressure	F01060404
				05	Thermal	00	Unspecified	F01060500
02	Fossil	00	Unspecified	00	Unspecified	00	Unspecified	F02000000
		01	Solid	00	Unspecified	00	Unspecified	F02010000
				01	Hard coal	00	Unspecified	F02010100
						01	Anthracite	F02010101
						02	Bituminous coal	F02010102
						03	Coking coal	F02010103
						04	Coke-oven coke	F02010104
						05	Lignite coke	F02010105
				02	Brown coal	00	Unspecified	F02010200
						01	Sub-bituminous coal	F02010201
						02	Lignite	F02010202
						03	Brown coal briquette	F02010203
						04	Peat briquette	F02010204
				03	Peat	00	Unspecified	F02010300
				04	Municipal waste	00	Unspecified	F02010400
				05	Industrial and commercial waste	00	Unspecified	F02010500
						01	Non-renewable	F02010501
		02	Liquid	00	Unspecified	00	Unspecified	F02020000
				01	Crude oil	00	Unspecified	F02020100
						01	Shale oil	F02020101
				02	Natural gas liquids (NGL)	00	Unspecified	F02020200
				03	Petroleum products	00	Unspecified	F02020300
						01	Ethane	F02020301

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
						02	Naphtha	F02020302
						03	Aviation gasoline	F02020303
						04	Motor gasoline	F02020304
						05	Aviation turbine fuel	F02020305
						06	Other kerosene	F02020306
						07	Gas/diesel oil	F02020307
						08	Fuel oil, low sulphur	F02020308
						09	Fuel oil, high sulphur	F02020309
						10	Liquid Petroleum Gas	F02020310
						11	Orimulsion	F02020311
						12	Bitumen	F02020312
						13	Lubricants	F02020313
						14	Petroleum coke	F02020314
						15	Refinery Feedstock	F02020315
		03	Gaseous	00	Unspecified	00	Unspecified	F02030000
				01	Natural gas	00	Unspecified	F02030100
				02	Coal-derived gas	00	Unspecified	F02030200
						01	Blast furnace gas	F02030201
						02	Coke-oven gas	F02030202
				03	Petroleum products	00	Unspecified	F02030300
						01	Propane	F02030301
						02	Butane	F02030302
						03	Refinery gas	F02030303
						04	Chemical waste gas	F02030304
				04	Municipal gas plant	00	Unspecified	F02030400
				05	Process gas	00	Unspecified	F02030500
						01	Carbon monoxide	F02030501
						02	Methane	F02030502
						03	Hydrogen (fossil sourced)	F02030503
						04	Phosphor gas	F02030504
						05	Oxy gas	F02030505
		04	Heat	00	Unspecified	00	Unspecified	F02040000

Level 1		Level 2		Level 3		Level 4		Full code
Code	Description	Code	Description	Code	Description	Code	Description	
						01	Non-renewable	F02040001
				01	Process heat	00	Unspecified	F02040100
						01	Non-renewable	F02040101
		05	Electricity	00	Unspecified	00	Unspecified	F02050000
				01	Thermal	00	Unspecified	F02050100
03	Nuclear	01	Solid	01	Radioactive fuel	00	Unspecified	F03010100
						01	UOX	F03010101
						02	AGR	F03010102
						03	MOX	F03010103
		02	Electricity	01	Radioactive fuel	00	Unspecified	F03020100
		03	Heat	00	Unspecified	00	Unspecified	F03030000
04	Gas synthesis	00	Unspecified	00	Unspecified	00	Unspecified	F04000000
		01	Furnace Gas	00	Unspecified	00	Unspecified	F04010000
05	Waste heat and cold	00	Unspecified	00	Unspecified	00	Unspecified	F05000000
		01	By-product in industrial installation	00	Unspecified	00	Unspecified	F05010000
		02	By-product in power generation	00	Unspecified	00	Unspecified	F05020000
		03	By-product in tertiary sector	00	Unspecified	00	Unspecified	F05030000



## Annex II: Types of technology

Level 1		Level 2		Level 3		
Code	Description	Code	Description	Code	Description	Full code
00	Unspecified	00	Unspecified	00	Unspecified	H00000000
01	Water electrolysis	00	Unspecified	00	Unspecified	H01000000
		01	Low temperature	00	Unspecified	H01010000
				01	Main product	H01010100
		02	High temperature	00	Unspecified	H01020000
				01	Main product	H01020100
02	Chlor-alkali electrolysis	00	Unspecified	00	Unspecified	H02000000
				01	By-product	H02000100
03	Steam Methane Reforming	00	Unspecified	00	Unspecified	H03000000
		01	Without CCS/CCU	00	Unspecified	H03010000
				01	Main product	H03010100
		02	With CCS/CCU	00	Unspecified	H03020000
				01	Main product	H03020100
04	Partial Oxidation	00	Unspecified	00	Unspecified	H04000000
05	Autothermal reforming	00	Unspecified	00	Unspecified	H05000000
06	Methanol reforming	00	Unspecified	00	Unspecified	H06000000
07	Ammonia reforming	00	Unspecified	00	Unspecified	H07000000
08	Other	00	Unspecified	00	Unspecified	H08000000

The Technology Codes for the production of electricity can be found in the latest Version of the EECS Fact Sheets.