



ECONYL[®] Qualified

Guidelines for partners

Version 1, valid until June 30, 2017

- 1. Introduction**
- 2. Sectors involved**
- 3. Paper tubes manufacturing requirements**
- 4. Logistic and distribution sectors requirements**
- 5. Rules for application**
- 6. Contacts**

ECONYL[®] Qualified

The “**ECONYL[®] Qualified (EQ)**” scheme recognizes Aquafil suppliers’ efforts made to enhance environmental performance of products and services, stimulating a dynamic behavior for continuous improvement.

All our partners already play an **active role** in ECONYL[®]’s supply chain and the EQ scheme aims at increasing the final product value as well as at strengthening a strict cooperation.

At present the scheme is voluntary but, starting **July 1, 2018**, all companies intending to supply goods and services within the ECONYL[®] production chain will be asked to apply.

In more detail, the scheme is organized per **business sectors**, rewarding specific action areas by means of a set of qualification requirements (targets) that are updated every year to take into account technology improvements.

These Guidelines, drafted with a **Life Cycle Thinking approach**, establish **criteria** and **application rules** to become an ECONYL[®] Qualified Supplier.

Scientifically based criteria for partner’s environmental performances evaluation are determined by means of selected pilot projects. At **present** and for **2016**, these criteria are determined for **two sectors** -- “paper tubes manufacturing” and “logistic and distribution services”.

Paper tubes manufacturing

Paper tubes are cylindrical yarn-carriers, classified as primary packaging. They are the first essential component of the ECONYL® yarn package.



Logistic and distribution services

The transport of ECONYL® yarn to following manufacturing sites plays an important role in the supply chain. Logistic companies are the subjects in charge of it.



All **European** partners belonging to these sectors can apply for the **ECONYL® Qualification**.

For the paper tubes manufacturing sector, the evaluation criteria are organized via the following **hotspot** areas.

ENERGY MANAGEMENT

Paper tubes manufacturing process is energy intensive, usually from electricity and fuel oil use.

WATER MANAGEMENT

Water consumption for cooling or other technological applications is an important issue in this manufacturing process.

PACKAGING MANAGEMENT

Companies give a high importance to packaging used for paper tubes, since its management leads to effects on two aspects: a good packaging optimization can generate raw material saving and product transport efficiency is strongly affected by packaging design.

PAPER WASTE MANAGEMENT

Technology involved in this process cannot avoid paper scrap. Their amount and final fate plays an important role.

RAW MATERIALS

Paper is the most used raw material, with other ancillary materials added (i.e. glue, water, pigments, etc.). The choice of materials with high/low performances affects the overall process performances.

COMPLIANCE

Other than legal compliance, application to other voluntary certification systems represents an added value for a company's profile.

Environmental performances per each hotspot area shall be evaluated by using selected Key Performance Indicators (**KPIs**). A specific **target** is identified per each KPI, as reported in the following table.

Hotspot	KPI	Target
Energy management	Energy consumption per unit of product	≤ 300 kWh/ton
	Amount of electricity from renewable energy source	$\geq 30\%$
Water management	Water saving	Implementation of at least 1 approved initiative for water saving
Packaging management	Packaging optimization	Implementation of at least 1 approved initiative for packaging optimization
Paper waste management	Amount of paper waste per unit of product	$\leq 10\%$
Raw materials	Recycled paper content	$\geq 80\%$
Compliance	Voluntary certifications	At least 1 approved certification

ECONYL® Qualification requires the achievement of **all the targets**.

The achievement of targets will be assessed by a third-party **audit**, ahead of the qualification status to become effective.

The following slides introduce **KPIs evaluation method**.
Data shall be **averaged on a year basis**.

KPI	Energy consumption per unit product
Evaluation method	$\frac{\text{Energy consumption [kWh]}}{\text{Total paper tubes production [ton]}}$
<p>Where:</p> <ul style="list-style-type: none"> • Energy consumption includes both thermal and electric energy for the production of paper tubes. Energy consumption for utilities (e.g. heat and energy for lightening for offices) shall be included. • Total paper tubes production: whole amount of produced paper tubes in the reference period. <p>Both terms shall be referred to the same period.</p>	

KPI	Amount of electricity from renewable energy source
Evaluation method	$\frac{\text{Electricity consumption from renewable sources [kWh]}}{\text{Total electricity consumption [kWh]}}$
<p>Where:</p> <ul style="list-style-type: none"> • Electricity consumption from renewable sources includes the amount of electricity, used for the production process, certified as renewable, coming from dedicated plants implemented within the company or from purchased Green Certificates (RECs, GOs, etc) • Total electricity consumption includes the total amount of electricity used for the production process <p>Both terms shall be referred to the same period. Documents supporting the certification of renewable energy source shall be provided.</p>	

KPI	Water saving
Evaluation method	<p><i>List of initiatives to save water within the paper tubes production process.</i></p> <p>Water saving shall be evaluated by calculating the difference of the following ratio before and after the implemented initiative:</p> $\frac{\text{Water consumption [m}^3\text{]}}{\text{Total paper tubes production [ton]}}$ <p>Where:</p> <ul style="list-style-type: none"> • Water consumption is the water used in paper tubes production process. Water consumption for utilities (e.g. for sanitary use) shall be considered as well. • Total paper tubes production: the whole amount of produced paper tubes in the reference period. <p>Both terms shall be referred to the same period.</p> <p>A lower value of the ratio in the “after” situation demonstrates the success of the initiative.</p> <p>Initiatives must be approved by Aquafil to be valid for qualification purposes.</p>

KPI	Packaging optimization
Evaluation method	<p><i>List of initiatives aimed at optimizing the use of packaging</i></p> <p>Packaging optimization shall be evaluated by calculating the difference of the following ratio before and after the implemented initiative:</p> $\frac{\text{Packaging material [ton]}}{\text{Total paper tubes delivered [ton]}}$ <p>Where:</p> <ul style="list-style-type: none"> • Packaging material represents the amount of material (for primary, secondary and tertiary packaging) used for paper tubes delivered to Aquafil • Total paper tubes delivered is the whole amount of paper tubes delivered to Aquafil <p>Both terms shall be referred to the same period.</p> <p>A lower value of the ratio in the “after” situation demonstrates the success of the initiative.</p> <p>Initiatives must be approved by Aquafil to be valid for qualification purposes.</p>

PAPER TUBES MANUFACTURING

KPI	Amount of paper waste per unit of product
Evaluation method	$\frac{\text{Paper waste [ton]}}{\text{Total paper tubes production [ton]}}$
<p>Where:</p> <ul style="list-style-type: none"> • Paper waste represents the amount of all paper scraps produced over the production process. • Total paper tubes production: whole amount of produced paper tubes in the reference period <p>Both terms shall be referred to the same period.</p>	

KPI	Recycled paper content
Evaluation method	$\frac{\text{Input recycled paper [ton]}}{\text{Total input paper [ton]}}$
<p>The recycled paper content is the proportion (by mass) of recycled material in the paper tubes. It is calculated by the ratio of the following two terms:</p> <ul style="list-style-type: none"> • Input recycled paper is the whole amount of recycled paper used for the paper tubes production. (Recycled paper is paper that has been reprocessed from recovered paper by means of a manufacturing process and made into a final product). • Total input paper is the whole amount of recycled and virgin paper used for paper tubes production. <p>Both terms shall be referred to the same period. Only paper tubes provided to Aquafil will be considered.</p>	

KPI	Voluntary certifications
Evaluation method	<i>List of voluntary certifications owned</i>
<p>Relevant certifications like ISO certifications (e.g. for quality or environmental management systems), EPD of produced product, etc. The certifications shall be demonstrated (by providing certificates) and approved by Aquafil to be valid for qualification purposes.</p>	

For the logistic and distribution services sector, the evaluation criteria are organized via the following **hotspot** areas.

ROAD FLEET EFFICIENCY

Road trips are unavoidable for logistic services. Fleet's polluting class is used as indicator of the efficiency of this part of service.

TRANSPORT MODE

Transport can be organized by water, air, road and rail: the choice of the mode generates strong effects on the overall environmental performance.

TRAINING

Road transport efficiency is strongly dependent on a human factor. Drivers' training for driving style, technology use and safety rules helps in improving environmental performances.

COMPLIANCE

Other than legal compliance, application to other voluntary certification system represents an added value for company's profile.

Environmental performances per each hotspot area shall be evaluated by using selected Key Performance Indicators (**KPIs**). A specific **target** is identified per each KPI, as reported in the following table.

Hotspot	KPI	Target
Road fleet efficiency	Polluting class of the vehicles used for Aquafil	At least Euro 5
Transport mode	Percentage of intermodal transport for Aquafil delivery	≥ 20%
Training	Training hours per driver	At least 3 h per driver
Compliance	Voluntary certifications	At least 1 approved certification

Econyl® Qualification requires the achievement of **all the targets**.

The achievement of targets will be assessed by a third-party **audit**, ahead of the qualification status to become effective.

The following slides introduce **KPIs evaluation method**.
Data shall be **averaged on a year basis**.

KPI	Polluting class of the vehicles used for Aquafil
Evaluation method	<p><i>List of road vehicles supplying Aquafil with polluting class specification</i></p> <p>All used vehicles shall belong to Euro 5 or higher polluting classes. Only trips carried for Aquafil shall be considered.</p>

KPI	Percentage of intermodal transport for Aquafil delivery
Evaluation method	$\frac{\text{Intermodal trips for Aquafil}}{\text{Total trips for Aquafil}} [\%]$ <p>Where:</p> <ul style="list-style-type: none"> • Intermodal trips: number of trips for Aquafil that can be classified as intermodal in the reference period. • Total trips: total number of trips for Aquafil, considering all the ways of transport, in the reference period. <p>Both terms shall be referred to the same period. Intermodal trips with substitution of part of road transport with rail mode shall be considered.</p>

KPI	Training hours per driver
Evaluation method	$\frac{\text{Total number of training hours [h]}}{\text{Average number of drivers of the company}}$
<p>Where:</p> <ul style="list-style-type: none"> • Total number of training hours: sum of all training hours (related to safe and sustainable drive) attended by drivers over the reference year. Only training hours that can be documented shall be considered. • Number of drivers: average number during the reference year. <p>Both terms shall be referred to the same period.</p>	

KPI	Voluntary certifications
Evaluation method	<i>List of voluntary certifications owned</i>
<p>Relevant certifications like ISO certifications (e.g. for quality or environmental management systems), EPD of produced product, etc. The certifications shall be demonstrated (by providing certificates) and approved by Aquafil to be valid for qualification purposes.</p>	

Necessary conditions for application

- Compliance with all European Union and country-specific **legal requirements**
 - Belonging to the **paper tubes manufacturing** sector or to the **logistic and distribution services** sector
-

HOW TO APPLY

STEP 1: REQUEST FOR APPLICATION

Partners send a **request for application** by email to Aquafil reference contacts (see paragraph 6)

STEP 2: SIGN OF AN INFORMATION AND DATA HANDLING AGREEMENT

A mandatory **Information and data handling agreement (AGREEMENT)** will be delivered by Aquafil and signed by parties.

Aquafil guarantees all data to remain confidential, as regulated by the agreement.

The agreement allows Aquafil to verify background documents by **on-site audits** with a 30-day written notice.

HOW TO APPLY

STEP 3: SUPPLIER SYNTHETIC DOCUMENT DELIVERY

Partners are invited to submit to **Aquafil** a **synthetic document** including the following key points:

- A **brief description** of the company profile with a concise technical overview of processes
- **KPIs evaluation** according to the “evaluation method” reported in paragraph 3 (paper tubes manufacturing) or 4 (logistic and distribution services). Excel files, explanation notes and other additional documents are welcome if useful to understand the KPIs evaluation.

TIMING

Deadline for application is **March 2018**.

The **ECONYL® Qualification** will be effective starting from **July 1, 2018** and has a **validity of 1 year**.

At the **qualification expiration**, partners shall apply again to obtain the renewal, using the latest version of the guidelines, published on the website at the following link (<http://www.aquafil.com/sustainability/econyl/>).

For applications or further information, please contact:

Mr. RICCI Paolo (Aquafil),

Paolo.Ricci@aquafil.com

Mr. LUI Massimiliano (Aquafil),

massimiliano.lui@aquafil.com