ARPAL is a non-profit association that was founded in April 1994 with the objective of promoting the recycling of aluminum packaging and achieve the recycling rates required by legislation.

It is constituted by the following entities:

- Aludium
- Constellium
- Hydro Aluminium Deutschland GMBH
- Novelis Europe

The mission of ARPAL is to promote the greatest number of initiatives and activities to promote and extend the habit of collecting and recycling aluminum packaging in Spain, in order to contribute to the conservation of the environment and natural resources through the implementation of the recycling culture.
ARPAL was created more than 20 years ago with a very clear goal: to promote aluminum packaging recycling in Spain. In all these years, the association has implemented different strategies that allowed to reach the current recycling rate of 45%.

One of the first concerns of ARPAL was to find out the true tons of aluminum packaging that, through different ways, enter into the recycling circuit. Given that most of these packaging go directly to scrap dealers, due it is the most valuable packaging material, ARPAL carries out a research among all the recycling companies since 2001. This research is made thanks to the collaboration of Ecoembes and associations of scrap dealers.

An aspect to be highlighted is that, for ARPAL, it is very important to work with local partners that allow us to have access to information and to work in various regions of Spain. In this way we can design activities adapted to different realities that help to achieve the recycling rates that legislation requires.

This report is a description of how we work at ARPAL, the activities that we carry out and the results obtained in 2017.

José Miguel Benavente
Managing Director
The first step to promote the recycling of aluminium packaging is to know the starting point. For this reason, ARPAL carried out every year, together with the Spanish Federation of Scrap Dealers (FER) and with the collaboration of Ecoembes, a study to calculate the volume of packaging that is recovered in Spain and through what channels is collected. The research examines the volume of material recovered in scrap dealers plants and this data complements the one obtained by Ecoembes (packaging collected through the yellow container, in MSW plants, in composting plants and through complementary collections). 2017 study data confirm that the recycling rate reached in that exercise was 45.9%.

ARPAL develops several activities focused on increasing this recycling rate by working with the Push/Pull strategy. On the one hand, promoting that citizens identify and be aware of the importance of recycling aluminum packaging and, therefore, deposit them in the yellow container (Push strategy); and, on the other hand, that scrap dealers get, from material acquired in different plants, the raw material that allow to obtain a high performance in melting plants (Pull strategy).

ARPAL always works with local partners to whom it offers training about aluminium packaging recycling and educational and promotional materials so they can do workshops and activities in schools, civic centers, summer camps, events, etc. Therefore the association creates constantly support materials for these partners such as presentations, videos, posters, etc. with information about aluminium packaging, the importance of recycling them and how to prepare them for their recovery.
During the year 2017, ARPAL has worked in:

**Andalucía:** with Universidad de Cádiz, Equa Cádiz, SUPLA in Córdoba, AVANZA in Sevilla, Training teachers in Almería and Málaga.

**Castilla-León:** together with Arte en Lata Ramirín and Environmental Center of Avila City Hall.

**Cataluña:** with Fundación Trinijove, Barcelona Forum District and Universidad Abat Oliba CEU.

**Comunidad de Madrid:** with Arte en Lata Ramirín.

**Mallorca:** Tirme and environmental educators.

**País Vasco:** with Environmental Education Center Artigas - Arraiz in Bilbao.
In all of these regions, **ARPAL** has developed various activities such as workshops with children and adults, participating in events, training volunteers from hotels, etc.

**ARPAL** also represents the aluminium industry in Ecoembes and works with other entities such as the Federación Española de la Recuperación (FER, scrap dealers association), Paisaje Limpio (antilittering association), Ecovidrio (EPR for packaging made of glass) and others. And, at European level, is part of the Group Packaging of the European Aluminium and collaborates with EAFA (European Aluminium Foil Association). ARPAL is also in permanent contact with public administration (state, regional and local) and sorting plants network.

About online presence and press department, **ARPAL** website ([www.aluminio.org](http://www.aluminio.org)) has much information about aluminium packaging recycling, videos, educational resources, etc. and the association also has profiles in Facebook, Twitter and Linkedin where daily post are made. Also, it has a YouTube channel, ARPALaluminio
The amount of aluminum packaging placed on the Spanish market in 2017 grew considerably (reaching almost double quantity that previous years) due to several new aluminum lines for cans production. In spite of this, the recycling rate has not diminished; on the contrary, the trend has been increasing reaching, during the year 2017, 44.081 tons of aluminum packaging recycled, what means the 45.9% of the total.

Recycling aluminium is very important, for the environment and for the economy. For this reason, all aluminum that is recovered is recycled and this metal is the most valuable packaging material. The aluminium recycled is also an excellent raw material to manufacture aluminum products because recycling process does not change the properties of this material. In fact, 75% of all aluminium which is manufactured from 100 years ago is currently in use, in the form of various products, thanks to the recycling process.

Another advantage of recycling aluminum is the saving of energy since manufacturing with recycled aluminium allows a saving of 95% of the energy needed to produce it from mineral bauxite.
arpal has created a network of partners and volunteers who have received training in aluminium recycling and who offer workshops and talks in schools, summer camps, events, civic centers, etc. This activity started in 2011 at the Universidad Abat Oliba in Barcelona when we trained students of Education; since then the activity has spread to other universities and other groups such as teachers of kindergarten, primary and secondary, leisure monitors and environmental volunteers from hotels.

The training carried out by ARPAL is theoretical and practical and consists on the following items: definition of aluminum, aluminum properties, consumption of primary aluminum and recycled aluminum; uses of aluminum; packaging made of aluminum and advantages of the use of aluminum in packaging; recycled aluminium, why is important to recycle aluminum; evolution of the recycling rate of aluminium packaging in Spain; process of recycle aluminum, aluminum life cycle and how to participate in its recycle process.

In the training sessions, staff from ARPAL also explains the educative workshop and all the material that the association provides for trainers. In addition, various aluminum packaging (rigid, semirigid and flexible) is showed and also is explained how to differentiate them from other materials. In workshops with children, crafts with aluminum packaging are carried out to fix the new knowledge.
During 2017, the following workshops have been made:

### 4.1 Andalucía

**Almería:** Workshops in two schools (in Vera and Antas) with teachers and students and volunteers for the environment (55 in total). Starting conversations with CEP Almería (Teachers Training Center).

**Cádiz:** Train to volunteers from Universidad de Cádiz and from EQUA (15 people). They did 35 workshops to 760 kids between 8 and 10 years old.

**Córdoba:** Train to 6 childhood teachers. In 2018 they prepare a Teaching Unit about aluminium packaging recycling for kids under 6 years old and it will be implemented in schools in Córdoba, Cádiz and Sevilla.

**Málaga:** follow up of the campaigns that started in 2011 and reached 80 schools from the city and province.

**Sevilla:** train to 3 leisure and free time monitors form AVANZA association that will carry out intergenerational workshops in 2018.

### 4.2 Castilla-León

A total of 193 workshops have been given through 2017. 171 were with students aged between 6 and 14 years (5,833 children), 7 with monitors (with a total of 120 participants), 8 with teachers (50 attendees) and 7 with adults (120 people).

The locations where these workshops have been conducted are Ávila, Salamanca, Segovia, Zamora, León, Valladolid, Arevalo and some villages in Castilla-León region. Some workshops took place at the Bird Zoo, Zoo in Valladolid, summer camps in Navaldijio, Environmental Classroom in Avila and Environmental Center San Nicolas.

### 4.3 Cataluña

In Barcelona **ARPAL** offered a talk to 30 people from Meliá hotels staff that are environmental volunteers. After, aluminium packaging workshops were held with 25 children in the Hotel Meliá Barcelona Sky. We did also workshops in the Festival Break Dance at the Hotel Hilton Barcelona (80 attendees).

In the past we trained students from University Abat Oliba reaching 60 volunteers that are doing workshops in their jobs, summer camps, etc.
The Parque de Tecnologías Ambientales in Mallorca (Tirme) welcome 10,000 visitors annually. The two monitors who attend them (and two others that carry out talks at schools before the visit) have attended the training of ARPAL and communicate the message of the importance of recycling aluminium packaging among visitors.

The Centre of Environmental Education Arraiz-Artigas received 131 group visits during 2017 with a total of 4,106 participants. All of them have known the importance of recycling aluminum packaging and how to participate in the process.

Therefore, in 2017 ARPAL have been developed workshops in different regions of Spain with about 21,000 people (children and adults) and 180 new volunteers have been trained in aluminium packaging recycling (teachers, university volunteers and monitors of leisure and free time). The efficiency of this activity has been assessed with a statistical research.
other activities developed by ARPAL to promote aluminium packaging recycling

ARPAL promotes the recycling of all aluminium packaging (rigid, semi-rigid and flexible), but due to the lack of knowledge that has been detected over the last two it has developed specific activities that help to identify and recycle them. To achieve that these packaging are recycled properly, ARPAL developed the Teoría de la Bola, which consists of grouping semi-rigid and flexible aluminum packaging in a bag or make a ball with them before placing them in the yellow container.
ARPAL has launched the club “I recycle aluminum” and invites all attendees to workshops (especially kids) to join it. A card and a pin are offered to all participants as a reminder of their membership to the club and their commitment to recycle aluminum packaging and explain to their families and friends the importance of taking them to the yellow bin. On the back of the card one can read: “This card certifies me as a member of the Club I recycle aluminium and as a participant in ALU commitment: Recycle aluminium packaging in the yellow container and tell my family and friends to do the same.”

Thanks to the great introduction and welcome that ARPAL have had in this city, we are testing various initiatives in Ávila before expanding them to other regions where the Association works. One of them is the contest of craft-themed Halloween and Christmas that has been performed in schools of Ávila for the second consecutive year and in which participated more than 700 children.

The second test is a Stories Contest that has started the last quarter of 2017. ARPAL has proposed to schools in Ávila to make a contest with stories invented by kids about aluminum packaging and the yellow container. The proposal has been widely welcomed and will be held in 2018.

ARPAL also promotes the organization of Alufiestas (Aluparties), consisting in using aluminium products in decoration, games, recipes, etc. in a party and after recycle them. We spread the idea through our website (where there is a specific section) and through social media.
Together with Fundación Trinijove, in Barcelona, ARPAL is conducting the following campaigns:

- Collecting of aluminum packaging in bars and restaurants in Barcelona Airport through yellow containers installed by ARPAL and Trinijove Foundation (and provided by Ecoembes); Trinijove is in charge of its management (maintenance and collection of the material). In 2017, there were 160 containers between the T1 and T2 terminals.
- Collection of aluminum packaging in hotels in the area of Forum in Barcelona, together with Barcelona Forum District. 8 Hotels from Vincci, Princess, Hilton and Meliá chains currently participate in the campaign and every year more hotels join it.

Through 2017, with its partners, ARPAL has been present, conducting workshops and other activities, in:

- Semana Cultura de la Naturaleza en Ávila. (Nature Culture Week).
- Romería en La Nava de San Antonio de Segovia. (Pilgrimage)
- Campamentos de verano de Navalguijo (Sierra de Ávila). (Summer camps)
- Feria Artesanía de Aldeaseca (Ávila). (Handcrafts fair)
- Feria Medieval (Ávila). (Medieval Festival)
- Carrera de Obstáculos de Gotarrendura (Ávila). (Obstacle course).
- Campeonatos Nacionales de Deporte y Salud (Ávila). (Sports and Health Competition).
- Cena Benéfica de Barcelona Forum District en Hilton Diagonal (Barcelona).
- Rastrillo solidario en el Festival de Break Dance (Barcelona).
- Family Day Hoteles Meliá (Barcelona).
- Primavera en Río, organized by Parque Metropolitano de los Toruños y Pinar de la Algaida in Puerto Real (Cádiz). More than 100 attendees.
- Workshops about solar cooking with the association Solar Cooking Show in Cádiz. The solar kitchen, oven and bread-maker were made of collected aluminium and the chef prepared cus-cus, bread and tortilla de patatas.
ARPAL has a large documentary collection about aluminium packaging recycle. All information is available in the website www.aluminio.org

- 31 videos (two with English subtitles and one in English with subtitles in Spanish) about aluminium packaging recycling and ARPAL activities developed.
- Poster about aluminium packaging and where to recycle them.
- Workshop about aluminium packaging recycling with proposal of activities.
- Aluminium Life Cycle poster and paper.
- Information for trainers.
- Posters for schools.
- Links to handcrafts made of aluminium packaging.
ARPAL press department

ARPAL also works as a press office writing and spreading information to the media and responding to the requirements of journalists. 9 press releases, which were also post on the website of the Association, were sent in 2017 to the media.
ARPAL has always had the concern of quantitatively assessing its performances to check the effectiveness and introduce, if necessary, appropriate corrections. For this reason, it collaborated with four researchers from the International Universidad Internacional de Cataluña, Universidad de Barcelona and the Universidad de Navarra carrying out a statistical study about the workshops held in Cádiz and Ávila. The goal was to assess if workshops work in achieving knowledge, awareness and convince kids to recycle aluminium packaging.


Summarizing, this study revealed that ARPAL workshops are a good tool that allow participants to expand their knowledge about aluminium packaging, to increase the awareness towards their recovery and to grow the intention to dispose them in the yellow container.
The ARPAL community has remained with 3.118 followers. In 2017 the interactivity has improved since that every day ARPAL publications are discussed, evaluated and shared. The average participation is 8%. There is a large engagement to the brand considering that every post is shared between 60 and 90 times.

Facebook estimates that ARPAL reaches 1,408,651 people per month and during 2017 this factor grew by 33%. ARPAL performs 5/7 weekly posts combining material that generates traffic to the website of the Association, news, curiosities about aluminum, crafts made of aluminium and workshops done.

ARPAL target in Facebook is the following:

We have managed to increase slightly the community in 2017 but at a very slow pace (only 40 more people compared to the previous year). By December, ARPAL had 416 followers in Twitter. It has grown in interactivity and every day ARPAL publications are discussed, evaluated and shared. According to Twitter, content almost reach 719,712 people.

The target of ARPAL on Twitter is:

People who like your page

<table>
<thead>
<tr>
<th>Age</th>
<th>% of the audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>de 13 a 17</td>
<td>1 %</td>
</tr>
<tr>
<td>de 18 a 24</td>
<td>7 %</td>
</tr>
<tr>
<td>de 25 a 34</td>
<td>49 %</td>
</tr>
<tr>
<td>de 35 a 44</td>
<td>30 %</td>
</tr>
<tr>
<td>de 45 a 54</td>
<td>10 %</td>
</tr>
<tr>
<td>de 55 a 64</td>
<td>2 %</td>
</tr>
<tr>
<td>mayor de 65</td>
<td>&lt; 1 %</td>
</tr>
</tbody>
</table>

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>64 %</td>
</tr>
<tr>
<td>Woman</td>
<td>36 %</td>
</tr>
</tbody>
</table>
135 followers (25 new in 2017) and 1,633 visits. The profile has grown in interactions and each post usually has between 3 and 6 recommendations, is shared at least three times and is discussed one. Increased interaction allows arriving to more people. Specifically, in Linkedin, ARPAL arrived to 20% more people during 2017.

Traffic data

- Mobile devices, all pages
- Computers, all pages

Characteristics of visitors

- Social and community services: 15.38%
- Business development: 7.69%
- Engineering: 7.69%
- Finance: 7.69%
- Marketing: 7.69%
Examples of posts in social media profiles: