



never refuse to reuse

Porto Valtravaglia, Italy JUNE 2021

ECOPIXEL manufactures customized products from recycled PELD4 plastics, packed inside a recycled & recycable PELD4 plastic bag, this way any ECOPIXEL product is entirely recycable and potentially circular. In fact ECOPIXEL gladly takes back any purchase from ECOPIXEL.

ECOPIXEL produces differently coloured PELD4 materials, that differ due to their color in recycled content. During the years we have managed to find more and more colors from waste streams requested by our clients so to be able to offer an always higher recycled content material. ECOPIXEL goes from 60 to 100 % recycled content material and we see ourselves grow towards 80 to 100 % recycled content. Of course it is up to our client to choose for our 100% recycled materials already today.

ECOPIXEL RETAIL

Since our start we work in the retail field; fashion companies immediately understood the advantages of working with ECOPIXEL and our recycled plastic; being creative with textures and colors, being innovative with the multiple looks they can achieve. Amaze consumers investing a realistic amount of money and lastly being able to disassemble the facilities and send them back directly to ECOPIXEL for recycling.

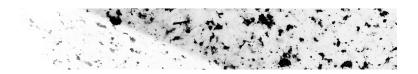
We encourage our clients in the retail sector to be circular with the products they buy from us, taking back their products after the exhibition is finished.

Two examples we choose to concretely demonstrate our past actions on the retail field:

UNIQLO Milan worked with ECOPIXEL on an temporary installation that lasted 4 months.

They chose for modules produced in one piece recycled waste material, made from the same polymer, therefore this pieces were entirely recycled once the installation was over.

CITADIUM PARIS A department store, shop with 6000 sqm and over four floors, chose to work with ECOPIXEL since 3 years now. Developing organizers that showcase its specialization on urban, skate, rock and street wear. This organizers are made in one piece structure, saving material, optimizing production and energy consumption. CITADIUM keep products in use: this organizers used and reused in different and versatile installations showcasing each time different products. Lastly no glue or joins are included, therefore can be entirely recycled.



ECOPIXEL 2021-2022

ECOPIXEL / material and production technique

ECOPIXEL follows a rigid commitment never* to mix different plastic typologies in its recycle process/methods in order to obtain fully recyclable "circular" material that also after its lifecycle remains useful. We feel once plastics are made, with the right care, can be used forever and wherever. Keeping materials clean (read monomer) also means we can calibrate the exact right temperature during their recycle transformations and so none of the material molecules will ever burn, keeping the material at all times intact for any next recycle run. ECOPIXEL already features and proposes 3nd and 4th cycle materials. During the years, ECOPIXEL has developed different production techniques & materials. From its 3D pressurized method (for 3D moulded shapes) to 2D pressed sheets offering also CNC cutting service to even injected and vacuum formed production methods. ECOPIXEL's pressurized method is best described as a blow moulding technique on a vibrating mould. As no other technique it offers the possibility to create sharp edges and hollow, watertight shapes. Because ECOPIXEL calibrates the temperature at the exact precise melting temperature of the involved material, the shredded pixels stay visible in the final product.

Thanks to the multilayer possibility of ECOPIXEL's pressurized method, our research has led to a number of innovative material categories that both aesthetically and structurally benefit from these different layers. One of the most fragrant and unique material is certainly our "AUDIO" version that thanks to different layers builds up in an acoustically absorbent material. Another fine example is our Blue the Gascogne effect, that only thanks to this principle can exist.

ECOPIXEL PRIME colors

20 years of work with plastic in industrial design and over 9 years of experience with recycled plastics has given us a leading position in recycled materials in which ECOPIXEL has developed a vast range of colors and possibilities. Apart from some very special typologies such as: Open Skin, PERT FLEX, TAPS*, TRASHPLAST*, TRASH standard, Blue de Gascogne and others, ECOPIXEL has developed a range of specific colors that are based on ECOPIXEL's "seven" premixed, and therefor replicable even over time, color batches. In the following list of ECOPIXEL PRIME COLORS you will find a list of over 90 colors that can be reproduced any time you need, and so, ideal for your product standards. Nevertheless is important to note that ECOPIXEL PRIME COLORS have different recycle percentages due to waste-availability, that may differ from time to time as is available from our supply chain.

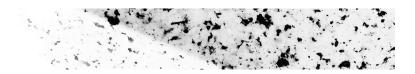
*Only in our materials:

TRASHPLAST & TAPS, where incoming materials were already mixed, you will find PEHD2, PELD4 & PP5 mixed, still resulting a recyclable material with our methods.

High percentage recycled ECOPIXEL materials, recycling our severest 90 to 100% recycled materials:

- TRASH (100% post-consumer & industrial PELD4 waste)
- TAPS (95% post-consumer waste PE-PP bottle taps)
- Black is the new Black (90 to 95% post industrial PELD4 waste / featuring 5 different color options based on black)
- Ecopixel "AUDIO" (95% post-industrial PELD especially designed multilayer acoustic absorbing material for material for speaker enclosures & Bluetooth speakers)

We set our goal to continuously develop new goals to continuously develop new typologies to stimulate our clients to use higher percentage recycled to materials. Ecopixel is always on the look for new suppliers of materials, investing time and effort in research to always obtain new possibilities.



Introducing new materials:

PERT by ECOPIXEL

A highly FLEXIBLE OPEN SKIN material POLYETHYLENE OF RAISED TEMPERATURE RESISTENCE AND EXTREME FLEXIBILITY 100% RECYCLED CONSUMER WASTE.

ECOPIXEL creates BLUE PERT (Polyethylene of Raised Temperature Resistance). Thanks to the collaboration with Toptechnics (BE) who provides ECOPIXEL with this precious waste material, coming from the piping of floor heating systems, this unique material was born.

PERT is available in different typologies of which the PERT "FLEX" is certainly the most special version; is flexible as almost rubber/ soft materials and therefor ideal for seating or products that need to be flexible and comes in with slightly open skin effect. PERT STANDARD (up to 60% recycled) obtains a standard stiffness but is less strong in its source color.

Images: http://www.ecopixel.eu/PERT.html

ALABASTRO by ECOPIXEL

ALABASTRO by ECOPIXEL comes from household trash. Specifically from packaging and LDPE plastic bags. LDPE stands for low-density polyethylene, which is a thermoplastic that is created from the monomer ethylene. This type of plastic is often utilized in film applications because it is relatively transparent, as well as being flexible and tough. Low-Density Polyethylene Film is also used for agricultural purposes, such as keeping strawberries, mushrooms, and tomatoes fresh. LDPE is present in the home in the form of Pallet Wrap, Containers, Shrink wrap, Packaging, Bags and coverings, Clear plastic bags – frozen food bags, bin liners, household garbage, produce, bakery goods, and dry cleaning. Some of the main benefits of ALABASTRO by ECOPIXEL LDPE and therefore are:

- Impact strength
- Chemical resistance
- Low specific gravity

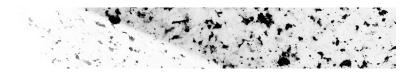
ALABASTRO LDPE It can be made anti-slip, anti-static, antibacterial and flame retardant. With all this ease and potential, LDPE recycling is a growing industry in the EU but the greatest challenge remains trying to make the plastic clean and decontaminated in an efficient way.

Images: http://www.ecopixel.eu/ALABASTER.html

TAPS

During the awareness process on how to reuse plastic waste at our hometown school for years we have our kids collect bottle taps. They never knew what has always happened with these taps, and so we thought it could be educating addressing the "taps" to a project that could actually come back to the school, to show the kids what can really be done with waste, rather than collecting without ever knowing what happens with it.

Since the school needed new washbasins ECOPIXEL was asked if the taps could become washbasins? After a few prototypes (and drawings we made with the kids) ECOPIXEL managed to create new washbasins made from the plastic waste the kids collected themselves. As a result the kid-students now collect taps and other plastic waste with much more pleasure and purpose than ever before.



ECOPIXEL thanks to the collaboration with the GIM PROGETTI association of Lake Maggiore Italy. Use the material consisting of plastic caps, collected in schools, restaurant businesses, bars and private homes.

Images: http://www.ecopixel.eu/TAPS.html

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ECOPIXEL uses a carton box packaging and tape with paper tape only so to keep their packaging entirely paper/carton, recycable and eco-friendly.

We have abandoned PVC packaging tape now using paper packaging tape for its packaging , and in exchange for extendable plastic foil use carton multiple boxes where possible.-

We especially developed new color-range in 100% recycled plastics for production and abandoned color-ranges that cannot be found in recycled materials.

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ECOPIXEL is signatory, since 2019, of The Global Commitment to start building a circular economy for plastic.

ECOPIXEL has achieved the level of know-how & reliability needed to be part of the New Plastic Global Commitment / created by Ellen MacArthur Foundation, in collaboration with the UN Environment Program.

Through the Global Commitment, businesses and governments commit to change how we produce, use, and reuse plastic. We will work to eliminate the plastic items we don't need; innovate so all plastic we do need is designed to be safely reused, recycled, or composted; and circulate everything we use to keep it in the economy and out of the environment.

We are proud to endorse the @Ellen MacArthur Foundation's call for the implementation of Extended Producer Responsibility (EPR) for packaging, together with +150 leading businesses and organisations. As Manufacturer and recycler.

We need a circular economy for packaging, in which it never becomes waste or pollution.

Packaging that cannot be eliminated or reused must be kept in circulation - in the economy, out of the environment.

For this to happen, we need dedicated, ongoing and sufficient funding for collection, sorting and recycling. EPR is the only proven and likely way to achieve this, and prevent tens of millions of tonnes of packaging from ending up in the environment every year. We are ready to step up and be part of the solution.

Read the full statement: plastics.emf.org/EPR

Who is involved 2021 Global Commitment report on plastic packaging (ellenmacarthurfoundation.org)
Find ECOPIXEL filtering by Category: Durable goods producer / by Type: Business Signatory / Country: Italy

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