



***newcleo***  
*Futurable Energy*



About **newcleo**:

Launched in:



**SEPTEMBER  
2021**

**600+** employees



up to **1000** employees  
by the end of 2024



presence  
across  
**Europe**



**25+ YEARS OF  
RESEARCH**



**14+ PATENTS**



**RAISED  
€400 MILLION**



# An innovative nuclear energy company

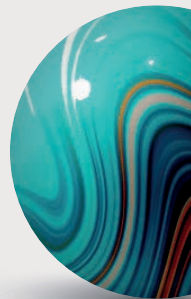
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Launched in September 2021, *newcleo* is an innovator in the field of nuclear energy with a total raised capital of €400m.

We are pioneering the combination of proven reactor technologies with new developments, and the closing of the fuel cycle to deliver **safer, cleaner, and reliable energy** at a competitive cost.

Under the leadership of our visionary co-founders, senior team and board of directors, we are aiming to build a **new industrial standard** in nuclear energy with the best possible safety and sustainability levels.

With offices, experimental centres and production facilities in **Italy, UK, Switzerland** and **France**, we have a global mindset at our core.



# Reducing the environmental impact of nuclear fission and providing safe and clean energy

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Meeting the world's **growing energy needs** is one of the main challenges for the coming years. Nuclear fission can provide safe, clean and reliable power for humanity. We are working to further **reduce the environmental impact** of energy production.

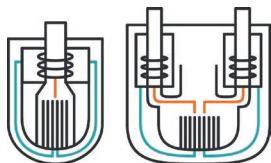
Our reactor will significantly increase fuel efficiency, enhance safety at a competitive cost and have the capability to **use as fuel the byproducts** already produced by the existing nuclear plants.

Our machines are **Generation IV** reactors, the reactor technologies internationally recognised as the next step in the **evolution of nuclear power plants**.

The EU Commission included innovative nuclear technologies like ours within the perimeter of the **EU Taxonomy** of environmentally sustainable economic activities.

# The time has come to take action and invest in the future of nuclear energy

## LEAD-COOLED FAST REACTOR



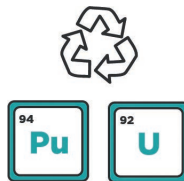
MINI LFR  
30 MWe

SMALL LFR  
200 MWe

GEN-IV SMR

BETTER USE OF FUEL

## CLOSING THE FUEL CYCLE



Using as fuel what today is  
considered waste

MOX FUEL MANUFACTURING

REDUCED RADIOTOXICITY

Our LFR-AS-30 demonstrator winner of “Innovative nuclear reactors” call for projects financed by the **France 2030** investment plan.





# ***newcleo's* technology**

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***newcleo's* approach** is based on existing, accessible technologies and the best choices in terms of **safety and sustainability**. This means:

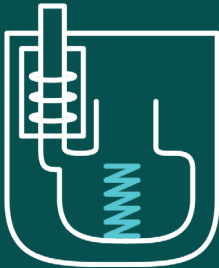


- very high levels of safety ensured by our **passive safety** systems and the **properties of lead**: working at atmospheric pressure, chemical, shielding, thermal properties and more. Also, it enhances thermal efficiency
- our **fast reactors** use as fuel the byproducts of the current nuclear industry, **eliminating the need to mine uranium** for hundreds of years and **significantly reducing** the high-level nuclear waste volume, otherwise headed to a geological repository
- **Small Modular Reactors** enable plant manufacturing, reducing costs and project risks. They swiftly meet the commercial demand for small generating units, such as for islands, remote communities, industrial uses, or a more flexible grid integration



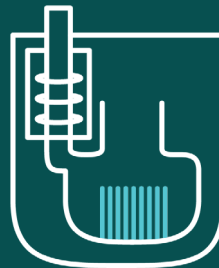
# Delivering decarbonised power at scale: **OUR FAST-PACED PLAN**

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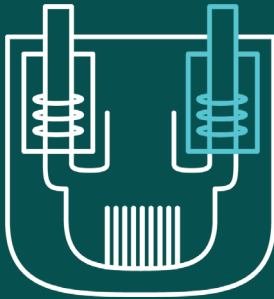
**2026  
PRECURSOR**

**non-nuclear  
industrial prototype**



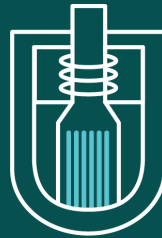
**2030  
AS-30**

**30 MWe nuclear reactor  
and demonstrator**



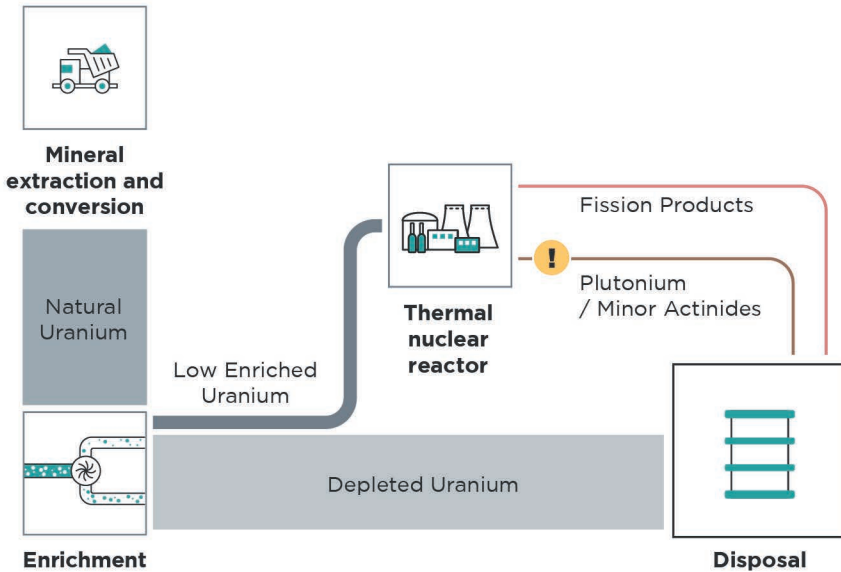
**2032**  
**AS-200**

**200 MWe First-Of-A-Kind  
(FOAK) reactor**



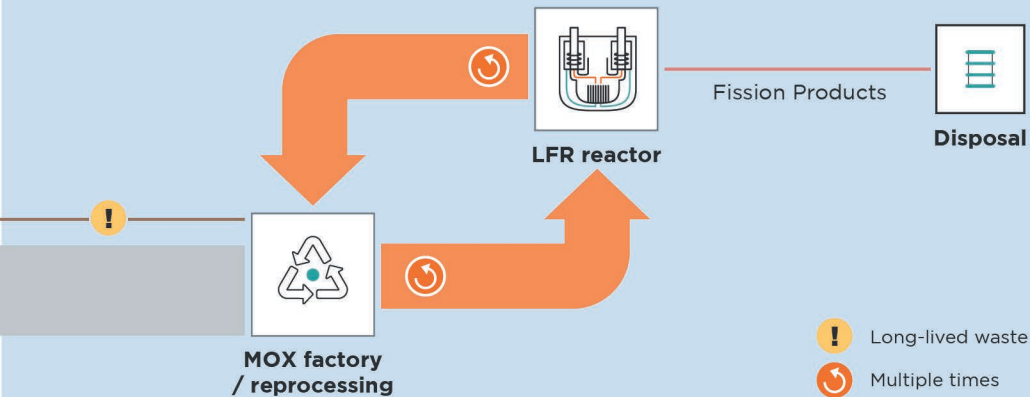
**2032**  
**TL-30**

**30 MWe nuclear  
closed reactor, also for  
maritime use**



# MOX fuel manufacturing

*newcleo* is aiming to establish MOX fuel manufacturing: advantages include the ability to extract energy from the current nuclear industry byproducts, and to support energy independence.



MOX fuel consists of:

**Depleted uranium**, a byproduct of the enrichment process of today's reactors, which finds little use today.

**Plutonium**, for years extracted from spent nuclear fuel as it was considered an asset for future generation of fast reactors, like ours.



**A positive company culture  
and a strong sense of  
belonging**

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Our company is new, yet has a very ambitious reason to exist: to change the world by providing it with clean, safe, virtually inexhaustible and sustainable energy. To achieve this, **we need to work together in harmony to build the project, but also to build a solid company culture.** Company culture is the way we express goals through our vision and beliefs; it is in effect our company's personality!

Each of our colleagues is a company ambassador in small and big ways, and we all share into our collective value and behaviours we aim to represent every day.

## VISION

**We feel the moral and scientific imperative to progress the nuclear industry, setting a new energy generation standard for the benefit of humanity and the environment**

## VALUES

**Spirit of  
Collaboration**

**How we run  
our business**

**Standard of  
Excellence**

**How we develop  
our projects**

**Focus on Care**

**How we behave**



**Aiming to build global  
manufacturing capabilities**  
*newcleo's industrial development strategy*

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Less than two years since its launch, *newcleo* actively started pursuing a targeted acquisition strategy to incorporate key companies with strong capabilities in nuclear engineering, manufacturing and waste management.

Adding know-how, elements of supply chain support, consolidated skills and strong track records will ground *newcleo*'s industrial delivery and enhance the self sufficiency of our company.

### **Enhancing businesses expansion, integrating activities**

*newcleo* intends to expand existing skills and services, supporting its development programme with investments. Reinforcing available facilities and adding the existing customer contract portfolio will generate revenues and ultimately benefit the whole company.

### **Grounding our project**

At the same time, acquired businesses will become integral to *newcleo*'s plans, developing and delivering crucial services for our projects' deployment.

In 2023 *newcleo* started the acquisition of two Italian companies, Servizi Ricerche e Sviluppo (**SRS**) and **Fucina Italia**, as well the French-Swiss group **Rütschi**.



# Our growing team

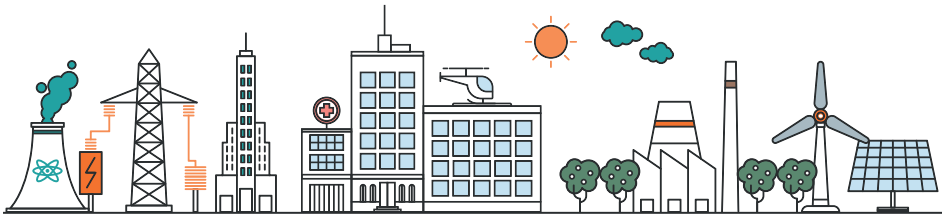
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From 0 to 600 in two years, our community of innovators is set to grow to 1000 by the end of 2024.

Our entrepreneurial and creative culture encourages continued personal and professional development. The future success of our company depends on a unique blend of deep experience and fresh mindsets.

The future belongs to those  
who have the **energy** to  
imagine it. And build it.

Find out more [newcleo.com](https://www.newcleo.com)



**newcleo**  
*Futurable Energy*