



# SOCIAL IMPACT REPORT



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# INTRODUCTION



# INTRODUCTION

*Dear Friends,*

The way we change the world begins with a cell.

Our bodies are built from tens of trillions of different cell types that somehow, instead of fighting among themselves for space or nutrition, work in harmony to sustain our wellbeing.

**They cooperate. They heal. They build.**

They represent pure potential for individuals and our planet. Harnessing the power of cells can unlock new hope for some of the world's most persistent health challenges, create more ethical sources of critical materials for the food industry and biological products without harming animals in the process, and even potentially change the way we produce agricultural products, using plant cell culture to ensure a more sustainable, resilient long-term supply.

They also represent a tremendous market opportunity. For example, the cultivated food industry alone is projected to grow into a \$140 billion market by 2030<sup>1</sup>. These cell-based products have the potential to dramatically reduce the environmental impact of food production and transform manufacturing for different industries using sustainable animal or plant cell production.

**Pluri is at the forefront of this extraordinary new world.**

Our state-of-the-art, proprietary bioreactor system – developed over many years during our work in regenerative medicine – provides a 3D micro-environment for cells, resembling their natural environment.

Our advanced manufacturing technology is tightly controlled, completely automated, efficient and scalable. It can generate high-quality cell products on a mass scale with batch-to-batch consistency, whether these cells derive from humans, plants or animals. Our cell expansion platforms are emerging as the new gold standard to accelerate creation of cell-based solutions.

Pluri is based in Israel and has a meaningful presence in Israel, the United States and the European Union. We are currently adapting our technology to create a range of **next-generation cell-based products, in medicine, food-tech, agri-tech and biologics. These advancements are key to solving some of the biggest challenges facing humanity – improving human wellbeing and increasing sustainability.**

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<sup>1</sup>"The future of food," Barclays news, 4 May 2021

# INTRODUCTION

You will read more about these ventures – and their benefit to our world – in this social impact report. We believe this is a roadmap to the brighter future we envision for humanity and our planet – one that we will build upon for years to come. In each section you will find icons which represent the UN’s Sustainable Development Goals, tracking our commitment to these objectives.

Even as we lead a global biotech revolution for tomorrow, we are deeply committed to being the change we wish to see today. In this report, you will also meet Pluri’s team. Based in Haifa, our corporate culture is enriched by ethnic and cultural diversity, promoting tolerance and peace. We are Jewish, Christian and Muslim. We are Arab and Druze. We are secular and religious. We are committed to gender diversity. Women employees represent an equal part of our company’s total workforce, including senior management and executive-level positions.

Our people are the true magic behind our innovative spirit.

Our people are why we are able to picture a future with greater food security, less animal cruelty, cleaner water, more habitable land and a healthier planet. Because of them, we are actively bringing this vision into reality.

*I couldn’t be prouder, and I hope you will join us.*



*Yaky Yanay*  
**Yaky Yanay**  
Chief Executive Officer and  
President of Pluri Inc.



# ABOUT

## “Where technology comes to life”

*Click below to watch the video*



### About Pluri



Nasdaq (PLUR)

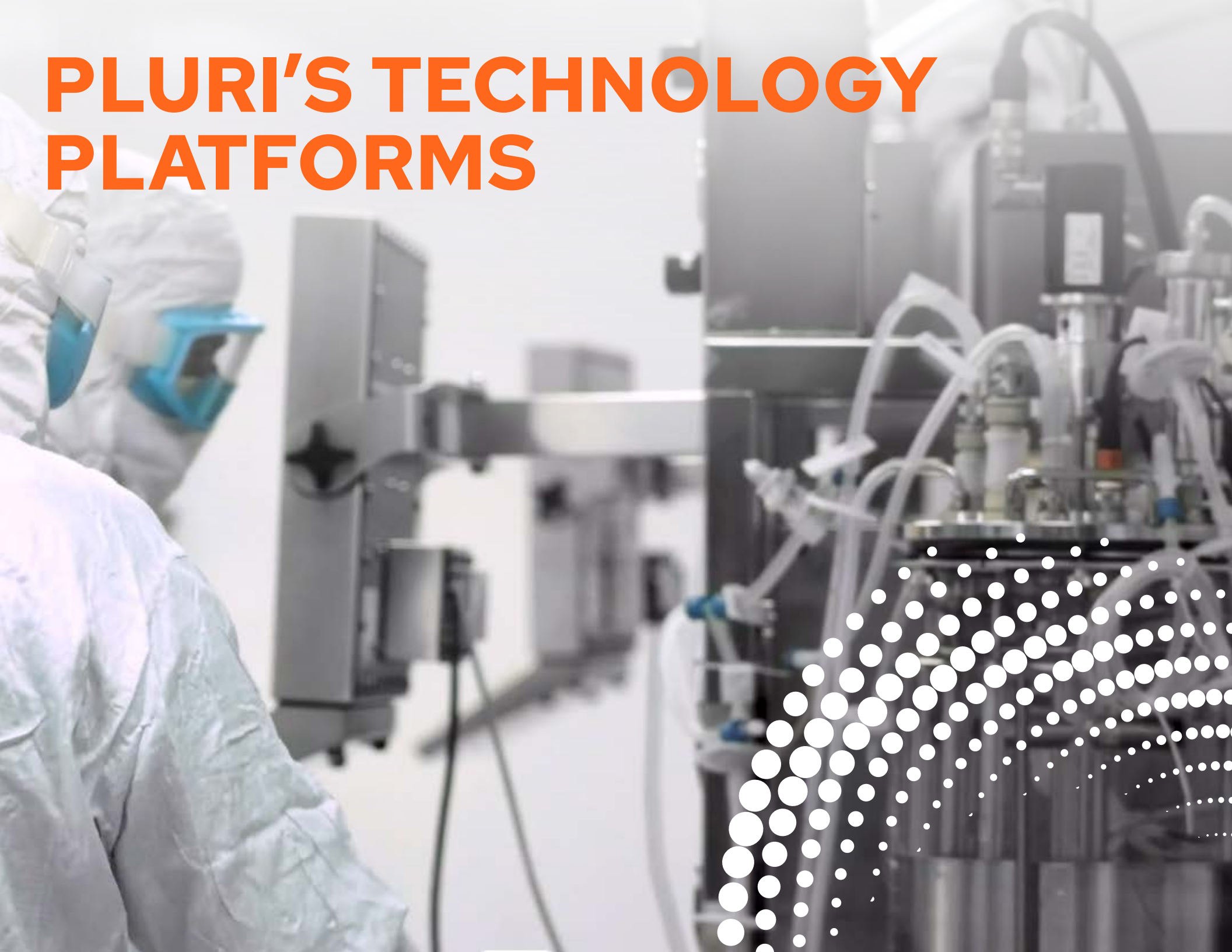


Based in Israel with  
global presence,  
including in the United  
States and Europe



Rich IP portfolio with  
140 patents granted  
globally

# PLURI'S TECHNOLOGY PLATFORMS



# PLURI'S TECHNOLOGY PLATFORMS

Since 2006, we've been taking single placenta cells, growing them into billions of cells, and creating groundbreaking cell-based therapies with the aim to treat patients around the world. Due to their nature, these cells have no need for genetic matching – a huge advantage in cell therapy.

**Today, we have perfected our manufacturing process** to develop next generation products for a variety of industries including pharmaceuticals, food-tech, biologics, agri-tech and beyond.

## Our Unique 3D Cell Expansion Technology and In-House Manufacturing Facility

Our proprietary bioreactor system provides a 3D micro-environment for cells that mimics the cell's natural growth environments. This method provides cells with the perfect environment in order for them to expand rapidly and remain viable as we transform them into innovative products and solutions. We also own a state-of-the-art in-house Good Manufacturing Practice (GMP) manufacturing facility which enables the production of high-quality cell-based products.

## PluriMatrix: A Breakthrough System for Unprecedented Industrial-Scale Production of Cell-Based Products

PluriMatrix enables industrial-scale production of cell-based products by using a packed-bed system design in which cells expand as tissue on scaffolds, increasing surface area and providing a uniquely effective growth environment. Cells can either be harvested as single cells or used along with the scaffolds as a completed tissue. The system also enables the simultaneous expansion of various cell types within the same platform, giving each cell type its own growth space.

PluriMatrix's state-of-the-art cell production system enables mass-scale cell manufacturing while minimizing the size requirements of the manufacturing facility compared to existing methods – significantly reducing both cost and ecological impact.

## Pluri Tech At-A-Glance

- Patented, proprietary **3D cell expansion technology** to produce **high-quality** cells in **mass quantities**
- **Scalable**, automated, efficient, reliable and **fully controlled**
- **Cost-effective**, consistent and validated
- Suitable for **multiple cell sources**: human, animal and plant
- Robust **in-house** GMP manufacturing facility

- Proven **batch-to-batch consistency**
- Manufacturing process **approved by key regulators:**





# BETTER HEALTH OUTCOMES FOR FUTURE GENERATIONS

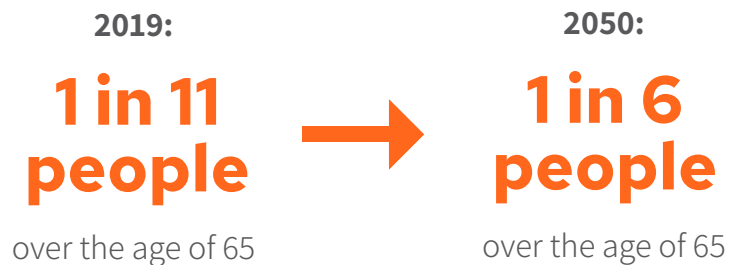




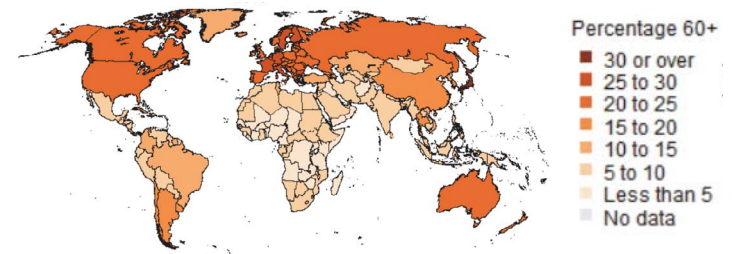
# BETTER HEALTH OUTCOMES FOR FUTURE GENERATIONS

## Meeting the Needs of an Aging Population

Pluri’s work in cell-based therapies and pharmaceuticals will help meet the critical need for more efficient health care to serve an aging global population. By the middle of the century, it is projected that one in every six people on Earth will be over the age of 65 – a stunning increase from today’s proportion. As the average age of our population rises, the strain on health care systems – and the cost of care – is following suit.

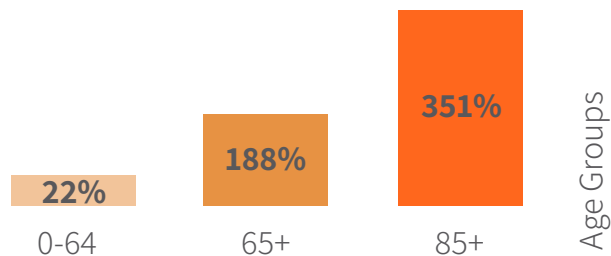


### Populations are getting older



\*World Population Aging, United Nations, 2015

### Percentage Change in the World’s Population by Age: 2010-2050



\*World Population Aging, United Nations, 2019





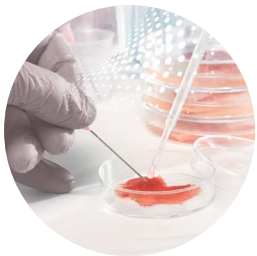
# BETTER HEALTH OUTCOMES FOR FUTURE GENERATIONS

Each product candidate holds the potential for more effective treatments and faster recoveries, and in some cases, provides hope for cure when no other options are available. Better, faster treatment is a vital need for aging populations in particular and for the global population more broadly.



## Next-Generation Treatments: Partnerships and Pipeline

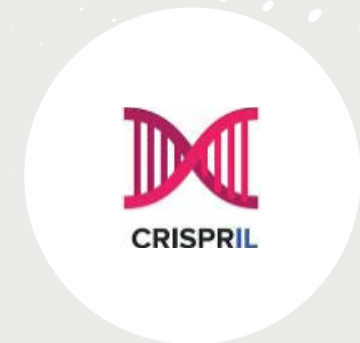
We invest in the research and development (R&D) of cutting-edge cell product candidates to treat unmet medical needs. Pluri is actively engaging with pharmaceutical companies around the world to explore potential collaborations involving R&D, clinical activity and licensing. These discussions lead to a realization of the existing gaps in efficient medical treatment and what potential options are feasible to address those shortfalls by leveraging Pluri's advanced technological capabilities and unique properties of based cell therapy.



## More Humane Sourcing of Animal-Derived Pharmaceutical Ingredients

Pluri has entered a collaboration agreement with a world-leading manufacturer of specialty biologics and active pharmaceutical ingredients (API). Through this collaboration, our platform will be utilized to develop and manufacture a unique API for biologics used to treat various hepatologic diseases.

Currently, this API is derived from animals that are sacrificed during the extraction process. The joint goal of the collaboration is to replace the current production method with a cell-based solution whereby the cells that secrete APIs will be grown in Pluri's 3D cell expansion bioreactor systems and continuously produce the necessary API, thus saving animal lives.



## CRISPR

Pluri is part of the Israeli Clustered Regularly Interspaced Short Palindromic Repeats of genetic information (CRISPR-IL) consortium establishing an innovative platform of genetic engineering. This platform enables the development of genetically improved cells tailored for treatment of indications with unmet needs. Using modified cells may enable Pluri and its partners to design a series of medical products that are more potent and targeted.

# BETTER HEALTH OUTCOMES FOR FUTURE GENERATIONS

## Case Study: Collaborating to Treat Knee Osteoarthritis

Pluri participates in consortiums in order to share knowledge and data with partners across the therapeutics space, including four partnerships under the European Union's Horizon Europe program.

For example, Pluri is part of the PROTO collaboration that recently **received a 7.5 million Euro non-dilutive grant** from Horizon Europe to continue the study of personalized treatments of Osteoarthritis using Pluri's PLX-PAD cells.

“Having evaluated PLX-PAD in other advanced-stage clinical studies, we see clear potential for this cell-based product to treat OA,” said Professor Tobias Winkler, Principal Investigator at the Institute of Health Center for Regenerative Therapies at Hospital Charité in Berlin, who is leading the consortium. “The immunomodulatory properties of PLX-PAD appear well suited to address the significant chronic inflammatory components that underly OA pathophysiology.”



OA is one of the most common chronic articular diseases, with a global prevalence of 16% in the adult population.<sup>1</sup> OA is the third most rapidly rising condition associated with disability,<sup>2</sup> showing an increase of 30% over the past decade, currently affecting more than 500 million people worldwide and about 57 million in Europe.<sup>3</sup>



Funded by the European Union under Grant Agreement Nr. 101095635  
Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.



## Commitment to Ethical Research

All of the research conducted by Pluri is governed by external ethics committees. In addition, Pluri complies with Good Clinical Practice (GCP), Health Insurance Portability and Accountability Act (HIPAA), General Data Protection Regulation (GDPR), and uses ethical cell sources, such as the placenta.

<sup>1</sup>Cui et al., *Global, regional prevalence, incidence and risk factors of knee osteoarthritis in population-based studies, 2020*, PMID: 34505846

<sup>2</sup>Hawker, *Osteoarthritis is a serious disease, 2019*, PMID: 31621562

<sup>3</sup>Osteoarthritis in Europe | Pfizer & The Economist Intelligence Unit (eiu.com)

# CULTIVATED FOOD FOR A CLEANER PLANET





# CULTIVATED FOOD FOR A CLEANER PLANET

**The way we raise livestock and produce food for mass consumption is unsustainable.**

Animal agriculture has an enormous environmental impact. Tens of billions of animals are slaughtered annually and the industry remains highly susceptible to deforestation, water shortages, greenhouse gas emissions, supply chain disruptions and increased energy consumption.

These environmental and economic risks will only increase over time as conventional food production is projected to grow by 60% by the middle of the century – putting the planet on a collision course with climate change.<sup>1</sup>

## Food’s Environmental Cost, By The Numbers:



**Animal agriculture is a major contributor to climate change.** Livestock production accounts for 18% of greenhouse gas emissions worldwide, and it is an even greater source of potent methane emissions.<sup>2</sup>



**More than a third of the world’s habitable land is used for raising livestock.** As demand for food continues to grow, increased livestock production leads to deforestation, destruction of wild habitats and other consequences.<sup>3</sup>



**Animal production uses up 29% of the world’s freshwater,** straining local water sources particularly in historically dry regions.<sup>4</sup>

<sup>1</sup>UN Environment Programme’s Emissions Gap Report 2022

<sup>2</sup>The Environmental Cost of Animal Agriculture – IAPWA

<sup>3</sup>Half of the world’s habitable land is used for agriculture – Our World in Data

<sup>4</sup>The water footprint of poultry, pork and beef: A comparative study in different countries and production systems – ScienceDirect

# CULTIVATED FOOD FOR A CLEANER PLANET

## Scalable Cultivated Food Manufacturing

Governments, investors and consumers are seeking alternatives to traditional food products, including cultivated foods grown in labs to achieve the taste and texture of food from an animal, but without the harmful climate impact. These cultivated products are projected to grow to **\$140 billion**<sup>1</sup> by the end of this decade, driven by the need for more ecologically and economically sustainable food production.



Pluri aims to become a global leader in this space through its joint venture with Israel's largest food producer, Tnuva Group. The joint venture, **Ever After Foods**, uses Pluri's knowhow and breakthrough PluriMatrix technology to overcome scaling and efficiency challenges that have historically hindered cultivated meat from reaching scale.

Ever After Foods estimates **PluriMatrix will enable a 700% increase in productivity** compared to other cultivated meat technology platforms.

## The Impact of Sustainable Food Production

**Reduced Environmental Footprint:** Requires a fraction of the natural resources and has minimal greenhouse gas output compared to conventional agriculture. The adoption of cell-based foods is projected to use up to **95% less land**<sup>2</sup> and **78% less water**.<sup>3</sup>

**Reduces greenhouse gas emissions:** This may **decrease air pollution by 93%** and may save the lives of more than two million people annually in the future.<sup>4</sup>

**Cleaner Food:** Hormone- and antibiotic-free, with a nutritional profile superior to that of traditional food due to precision control of fat content and added nutrients.

**Animal Welfare:** No animals are harmed in production.

**More Stable Supply Chain:** Production facilities are less vulnerable to changing climate and natural disasters than conventional farm and ranch lands.

<sup>1</sup>"The future of food," Barclays news, 4 May 2021

<sup>2,3</sup>New studies further the case for cultivated food over conventional food in the race to net-zero emissions, Good Food Institute

<sup>4</sup>West et al., Co-benefits of mitigating global greenhouse gas emissions for future air quality and human health, 2013, Nature Climate Change



## Cell-Based Foods

**93% less**  
air pollution

**95% less**  
land

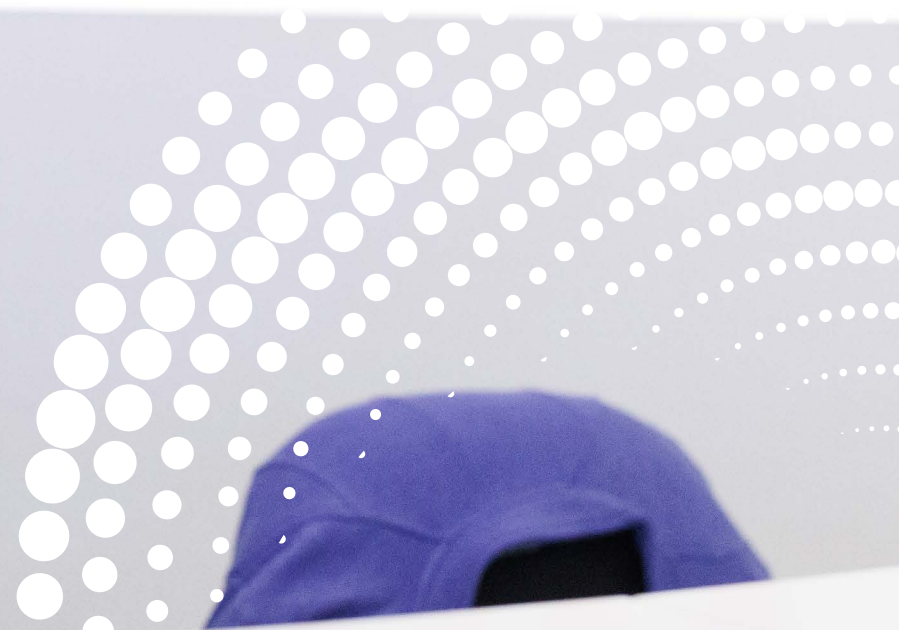
**78% less**  
water

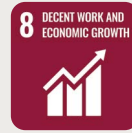


**WITHIN OUR  
WORKPLACE**



**pluri**





## WITHIN OUR WORKPLACE

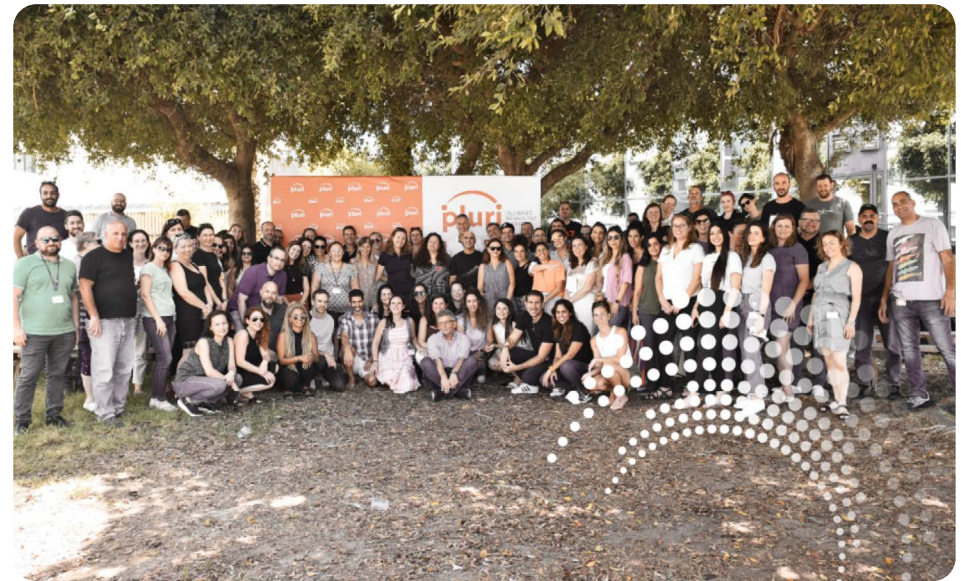
### Corporate Governance

Pluri's Board of Directors is responsible for overseeing the direction of the Company. The Board focuses on key policy and operational issues and helps the Company operate in the long-term interests of shareholders.

The Board has extensive involvement in the oversight of risk management related to Pluri and its business. This work is informed by regular reporting from the Audit Committee, which reviews Pluri's accounting, reporting and financial practices. This includes the accuracy of Pluri's financial statements, the surveillance of operational and financial controls, and compliance with legal and regulatory requirements. In addition, the Board receives detailed operating performance reviews from management.

Our Compensation Committee reviews and recommends to our Board annual base compensation, annual incentive bonus, equity compensation, employment agreements and any other benefits of our executive officers and administers equity-based plans.

Our Board and management team leverage their cumulative experiences and consider the interests of all stakeholders – including shareholders, partners, employees, suppliers, academic researchers, governments, customers and communities – to pursue long-term value for our company and drive the sustained health of our global community.



# WITHIN OUR WORKPLACE

## Putting People First

At Pluri, we believe that global impact begins at home. We take great pride in the diversity of our workforce and the support we provide to our employees in their personal and professional lives.



## Employee Development and Support



### Management Development

Pluri invests in growth from within. Managers receive a number of resources to continue honing their skillsets, including internal development opportunities, external consultants, and peer learning forums for department managers.



### Continuing Education

In order for our team to stay at the tip of the spear, Pluri offers employees access to seminars, conferences, classes and other educational programs, as well as the chance to deliver “open stage” presentations to the company on special topics.



### Employee Engagement

We invest heavily in recruiting best-in-class talent and developing a great culture. Whether it be department team-building days, marking personal milestones, or the work our culture committee does to provide culinary, literary and art programs throughout the year - we love making Pluri a wonderful place to be.

# WITHIN OUR WORKPLACE

## Who We Are

**63%** women employees

**68%** women management

**11%** minority employees

**3%** employees with disabilities



### Egalitarian Award

In **2022** and 2017, we were awarded the Egalitarian Employment Prize by the Israeli Ministry of Labor, Social Affairs and Social Services (2022) and by the Ministry of Welfare and Social Affairs (2017), for our promotion and integration of women in the workplace, encouragement of a healthy work-family balance and gender equality.



### Dun's 100

For 5 years in a row, Pluri was ranked in Dun's 100 top 50 Best High-Tech Companies to work for.

### Biotech Breakthrough Award

Pluri won the Cell Innovation of the Year award in the Cell Biology category of the annual BioTech Breakthrough Awards, receiving recognition for its patented and validated technology platform.

# OUR COMMITMENT TO THE ENVIRONMENT





# OUR COMMITMENT TO THE ENVIRONMENT

Spearheaded by our Ecology Committee, which is made up of 12 members, we find creative ways to support community initiatives around us, in the city of Haifa in the north of Israel. We share our expertise with students, fundraise and volunteer for social service agencies, and contribute to the environment and diversity of the region.

## Our Impact, By The Numbers

110

students hosted & mentored

180

hours of physician mentorship

\$100,000

in reclaimed costs from materials originally intended for destruction

100%

employee participation in volunteering

## Providing Support for the Community

Pluri donates time and funds to the following organizations:

- **Lev Chash Association** (providing economic, physical, and mental health resources)
- **Kav Mashve** (supporting Arab integration)
- **Taasyeda Association** (providing biotechnology education to youth)
- **Onward Israel** (providing internships)
- **Pluristyle** (clothing re-sale charity benefit)
- **Latet** (aid NGO)
- **HealthTech Fellowship** (mentoring physicians to implement innovation into day-to-day clinical care)
- **The Ecology Committee, Pluri** (promoting various ecological initiatives)



# OUR COMMITMENT TO THE ENVIRONMENT



## Pluri's Ecology Committee

Cleaning the Oren River at the Carmel Park.



## Creating a Sustainable Workplace

Our commitment to supporting employees and reducing our environmental footprint includes:



Installation of LED lights throughout Pluri facilities



Putting old equipment to good use through donations



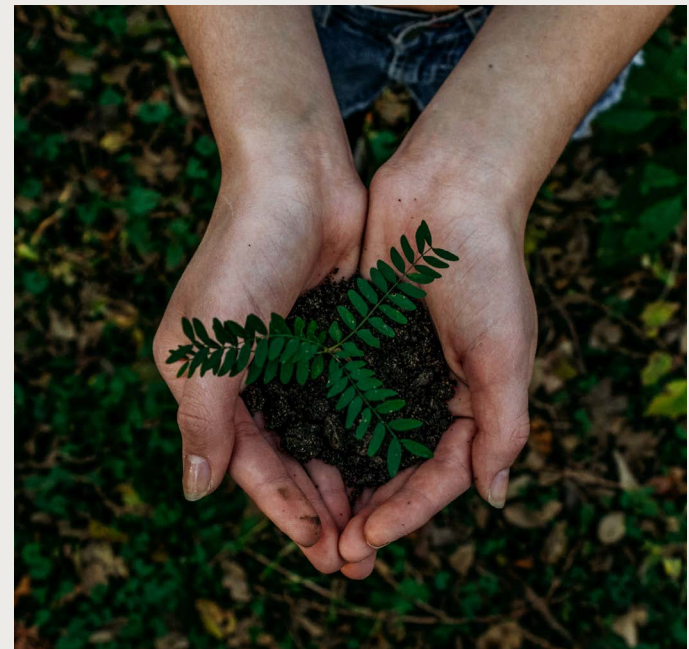
Comprehensive recycling program, including batteries, paper, power, and plastic



Use of reusable parts in cell manufacturing systems



Non-extensive use of organic materials



# PARTNERS

## Regulatory



## Scientific Collaborations And Partnering



## Funding







# THANK YOU

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