



The strategic guidelines have been approved on 2023-12-01 and updated on 2023-12-01

CLUSTER FTD LT „FOOD TECHNOLOGIES DIGITALIZATION LT”

STRATEGIC GUIDELINES FOR DEVELOPMENT 2024 - 2027

CLUSTER FTD LT „FOOD TECHNOLOGIES DIGITALIZATION LT” operates under the Joint Activity Agreement since January 14th 2019. Today cluster has 18 independent members: 16 - Enterprises 1 - Research organization and 1 - Educational organization.

We connect members from six countries: Lithuania, Denmark, Finland, Sweden, Latvia, and Switzerland.

Cluster FTD LT is a cross-sectoral cluster, whose axis is products of the metalworking and machinery industry for companies in the food industry and related sectors.

The cluster companies have 935 employees. Total income on 2022 - 82 771 583,00 Euro.

Value chain of economic activity of FTD LT cluster 2024 - 2027:

1. Agricultural companies - cultivation of apples, including new types of apples;
2. Producers of apple juice - production of juice concentrate;
3. Vegetable oil companies - processing of various vegetable oils;
4. Dairy processing companies - production of various dairy products;
5. Logistics companies - transportation of liquid food products;
6. Engineering and metalworking companies - develops and manufactures stainless steel equipment for food processing and transportation;
7. Digital solution providers - develop IT Products;
8. Science - experimental development organizations carry out research;
9. Education organizations - educational activities of the cluster.

CLUSTER FTD LT VISION - to become a competitive group for development, production, and supply of the food machinery industry by implementing digitalization of technologies in food engineering, processing, and logistics companies.

CLUSTER FTD LT MISSION - development and implementation of digital technologies in food engineering industries, involving science, education, manufacturers of processing equipment and suppliers of digital solutions.

CLUSTER FTD LT OBJECTIVES

- A. TO INCREASE INTEGRATION OF DIGITAL TECHNOLOGIES IN FOOD MACHINERY ENGINEERING, FOOD TRANSPORT MEANS ENGINEERING AND METALWORKING - MACHINERY COMPANIES.
- B. TO INCREASE PRODUCTION AND EXPORT OF DIGITALIZED FOOD MACHINERY AND FOOD TRANSPORT MEANS PRODUCTS.
- C. TO CREATE PRECONDITIONS FOR THE DEVELOPMENT OF HUMAN RESOURCES BETWEEN CLUSTER MEMBERS IN THE FIELD OF FOOD MACHINERY/FOOD TRANSPORT MEANS ENGINEERING AND MACHINERY INDUSTRY (DIGITALIZATION).



FTD LT CLUSTER SWOT ANALYSIS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • International inter-cluster cooperation is being developed for competence development (projects ERASMUS+ /CEMIVET / HUBS, COSME, Expo Cluster). • The members of the cluster are actively engaged in R&D activities and cooperate in the development of new products. • Active and open cooperation between science and business institutions • Long-term cooperation and trust between the cluster. • Members (cluster members do not compete). • The members of the cluster are focused on achieving a common result. 	<ul style="list-style-type: none"> • Cooperation with state institutions is not sufficiently developed. • Insufficient supply of specialists - engineers in the labor market. • Insufficient awareness of cluster FTD LT and its members. • Insufficient funding for the cluster for the development of the cluster structure from national institutions.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Adaptation of new EU instruments to expand joint cluster activities. • Attracting investment to develop R&D activities in the cluster. • Development of a cluster FTD LT product testing and demonstration platform. • Improving the competencies of specialists working in cluster activities. • Participation in events designed to increase cooperation initiatives. • Implementing the European Green Deal and the Digital Agenda. 	<ul style="list-style-type: none"> • Instability in markets to which cluster members export (Russia's war against Ukraine, China, etc.). • The changes in the legal regulations related to the certification of the products produced by the cluster. • Decreased funding for skills and competency development programs. • Reforms and changes in the education system that would make it more difficult to train young specialists.



STRATEGIC ACTIVITIES OF THE FTD LT CLUSTER 2024 -2027

1. R&D activities - experimental activities, creating and applying innovations in the sector, documenting R&D activities. DESIGN / ENGINEERING:

1.1. Development of tanks with heat exchange and mixing equipment:

- Modeling of heat exchange in tanks using „blown“ heating / cooling „jacket“ technology;
- Research on different types of mixing technologies and development of innovative designs:
 - o research and experimental development of frame mixers,
 - o research and experimental development of propeller mixers;

Indicators:

Number of implemented technologies (3 projects/y.)

1.2. Development of new Road Tankers:

- Modeling of frameless chassis parameters for road tankers (stiffness, damping, damped and unamortized masses and resonance calculations);
- Calculation and optimization of the wall thickness of a stainless steel tank truck under dynamic loads;
- Frameless chassis design using stainless or biphasic steel (non-carbon steel);
- Development of thermal insulation layers using composite insulation;

Indicators:

Number of implemented technologies (3 projects/y.)

2. FTD LT infrastructure development. (Obj. A):

- **FTD LT infrastructure development - FTD LT - creation of a product testing and demonstration platform**, involving cluster members and partners using new stainless-steel tanks and pressure vessels in the food industry, as well as tankers for the transport of liquid food products.

Indicators:

- A test and demonstration platform has been developed (a) Laboratory - physically - 1 unit.
- Demonstration platform – online - 1 unit.
- Created FTD LT communication platform -1 unit.

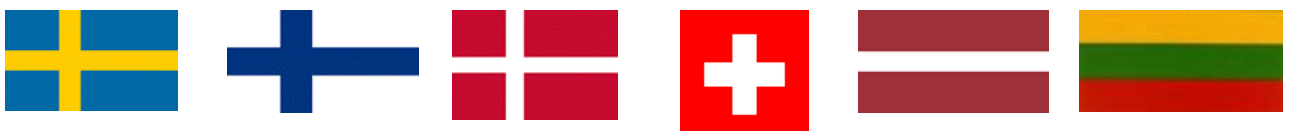
3. Commerce development of production, increasing sales, expanding export markets (Obj.B)

- Manufacture of containers and pressure vessels with heating / cooling circuits;
- Manufacture of miscellaneous mixing equipment;
- Welding of pressure and atmospheric tankers;
- Welding of frameless chassis;
- Methods of etching and passivation;
- Installation of composite thermal insulation;
- Maintaining the thermal regime of tanker products with less energy consumption (using renewable energy).

Indicators: Increased production in EUR + 1 mln. Eur/y.

4. Development of measures for the international recognition of FTD LT members (Obj.C):

Indicators:





Number of missions, exhibitions – 2 units/y.

Number of new contacts, new partners – 3 units/y.

5. Implementation of international quality standards. (Certification) (Obj. B):

Indicators:

- Number of measures developed – 2 units/y.
- Number of meetings with experts – 3 units/y.

6. Preparation of measures for professional development and competencies improvement members FTD LT (Obj. C):

- Data management according to process data, digitization;
- Competencies of a welder and a technologist;
- Certification of welding seams;
- „Cobot“ (collaborative robot) development;
- CNC milling and programming;
- Internships on management skills and technology uptake. (Masters Academy);
- Welding operator work process optimization;
- Dual training and apprenticeships;
- Green energy.

Indicators:

- Number of developed and implemented continuing vocational training programs – 2 programs /y.
 - Number of trained employees - 200 employees /y.
 - Number of internships prepared for specialists - 10 units/y.
- Specialists who participated in internships, number - 50 participants /y.
 - Number of engineering program graduates employed (New)

7. Development of the FTD LT cluster structure by preparing and participating in international EU programs (Obj. C):

Indicators:

- Number of cooperation initiatives (events) - 5 units/y
- Number of cluster members involved – 15 members



**ACTION PLAN PREPARED IN ACCORDANCE WITH FTD LT STRATEGIC
GUIDELINES 2024 – 2027**

Strategic direction	Task	Organizers, executors	Resources, funds
1. R&D activities - by developing and adapting innovations in the sector, documenting R&D activities. DESIGN / ENGINEERING	1.1. To invite members to participate in projects organized by FTD LT.	FTD LT Chairman of the Board; FTD LT Coordinator	Human Resources Administrative funds
	1.2. To organize presentations of cluster members for identification of R&D activities	FTD LT Chairman of the Board; FTD LT Coordinator	Human Resources Projects funds
	1.3. To organize an annual event „R&D Laboratory“ in May	FTD LT Chairman of the Board; FTD LT Coordinator	Human Resources Projects funds
2. FTD LT infrastructure development	2.1. To prepare FTD LT communication system	FTD LT Coordinator	Human Resources Projects funds
	2.2. To prepare the FTD LT cluster website for ExpoCluster FTD LT development	FTD LT Chairman of the Board; FTD LT Coordinator	Human Resources Administrative funds
	2.3. To prepare a monthly „Newsletter“	Working Group	Human Resources Administrative funds
	2.4. To prepare projects. „Development of a Test and Demonstration Platform / Laboratory/“	Working Group	Human Resources Projects funds
3. Commerce - development of production, increasing sales, expanding export markets: (Obj. B):	3.1. To prepare export and market search projects.	FTD LT Chairman of the Board; FTD LT Coordinator; Working Group	Human Resources Commercial funds Projects funds
	3.2. To encourage cooperation initiatives	FTD LT Chairman of the Board; FTD LT	Human Resources



		Coordinator	Projects funds
4. Development of measures for the international recognition of FTD LT members	4.1. To participate in exhibitions and business missions, presenting the products of cluster members	FTD LT Coordinator; Working Group	Human Resources Projects funds
	4.2. Strengthen links with municipal, business, investment and educational institutions and organizations.	FTD LT Chairman of the Board; FTD LT Coordinator	Human Resources Administrative funds
	4.3. To expand international cooperation in project preparation and implementation: Erasmus+ KA2 Interreg, HORIZON and others programs.	FTD LT Chairman of the Board; FTD LT Coordinator; Project working Group	Human Resources Projects funds
	4.4. To represent the cluster in municipal, educational and business structures	FTD LT Coordinator	Human Resources Administrative funds
5. Implementation of international quality standards	5.1. To ensure funding for the implementation of quality standards	FTD LT Chairman of the Board;	Human Resources Projects funds
	5.2. To organize meetings with quality standards implementation experts, for quality assessment, etc.	FTD LT Chairman of the Board; FTD LT Coordinator; Project working Group	Human Resources Projects funds Members and participants funds
6. Preparation of measures for professional development and competencies improvement members FTD LT	6.1. To provide training services to members, e.g. During the formation of the services of the CLUSTER ACADEMY	FTD LT Chairman of the Board; FTD LT members, experts	Human Resources Projects funds
	6.2. To develop and	FTD LT Chairman	Human Resources



	implement continuing vocational training programs	of the Board; FTD LT Coordinator	Projects funds Members and participants funds
	6.3. To prepare projects and programs for specialist internships	FTD LT Chairman of the Board; FTD LT Coordinator; Working group	Human Resources Projects funds Members and participants funds
7. Development of the FTD LT cluster structure by preparing and participating in international EU programs.	7.1. Organization of initiatives, events, meetings to increase cooperation	FTD LT Coordinator	Human Resources Projects funds Members and participants funds
	7.2. To increase the number of cluster members, strengthen the value chain and improve product quality	FTD LT Chairman of the Board; FTD LT Coordinator;	Human Resources Projects funds
	7.3. To get involved in international value chains - international platforms	FTD LT Coordinator	Human Resources Projects funds Members and participants funds

FTD LT cluster management organizational structure 2024 -2027:

- I. General meeting of partners (cluster members);
- II. Cluster Board. Chairman of the Board PhD. Vaidas Liesionis
- III. Cluster administrative structure:
 - a) Cluster coordinator – Alytus BASC director Algimanta Ščiglinskienė.
 - b) Communication specialist, Alytus BASC specialist Rokas Masionis.
 - c) Coordinators of Joint Initiatives.

IMPLEMENTATION OF FTD LT cluster STRATEGIC GUIDELINES is evaluated by the general meeting of cluster members.

The cluster board is responsible for the implementation of the FTD LT cluster strategic guidelines. The operational activities of the FTD LT cluster are organized by the cluster coordinator.

Contacts:

PhD.Vaidas Liesionis, FTD LT cluster chairman of the board Phone +370 687 56780, vaidas@ftd.lt
Algimanta Ščiglinskienė, FTD LT cluster coordinator, Phone +370 652 81500, algimanta@ftd.lt
Rokas Masionis, FTD LT cluster communication specialist, Phone + 370 682 50121, info@ftd.lt

FTD LT cluster website: <https://ftd.lt/en/>

