

We are building future

Kodumaja

www.kodumaja.com



2012

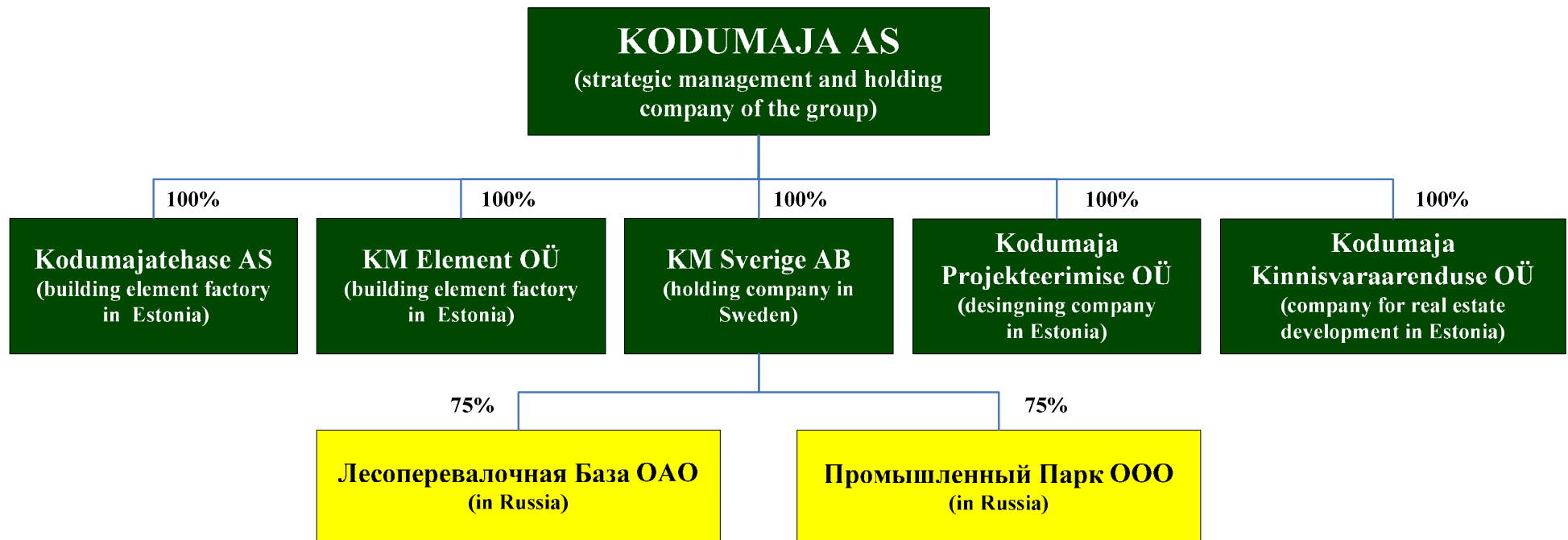
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 **KODUMAJA**

Kodumaja

1. Name of trademark -  KODUMAJA
2. Group of the companies who are acting under the trademark Kodumaja
3. Sometimes used when talking about specific company in the group of Kodumaja companies

Group of Kodumaja companies



Design and construction of prefabricated wooden frame buildings

Kodumaja produces and builds mainly:

- **apartments in multi - storey apartment buildings – 90 – 95%**
- **private dwellings – 5 – 10 %**

and if capacity is available then also

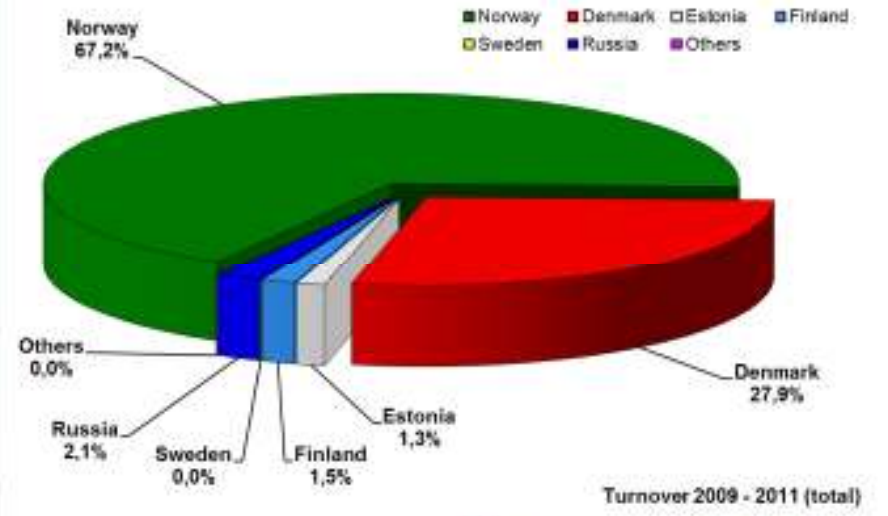
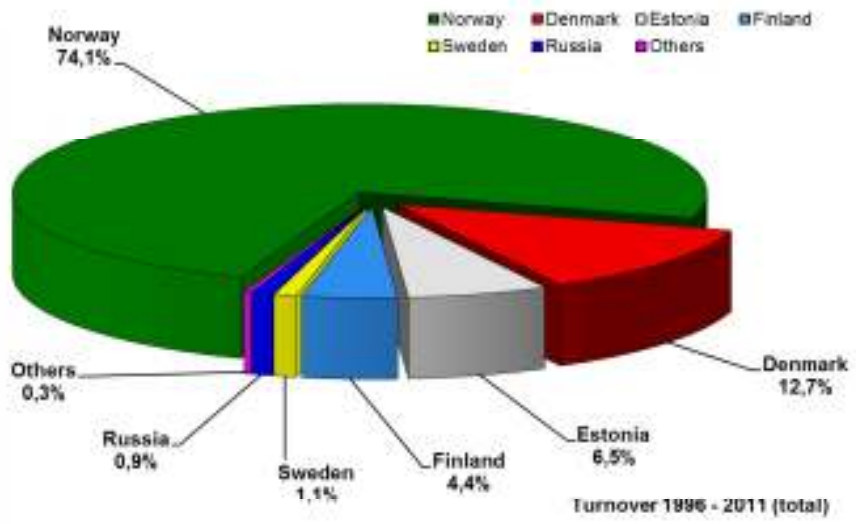
- social buildings (assisted living, nursery schools, schools), hotels, offices, modules for camps, holiday homes

Sales georgaphy and turnover



As of 31.12.2011

- Flats in 2-5 storey blocks of flats
- Flats in semi-detached and terraced houses
- Hotel rooms in hotels
- Private dwellings and Norwegian cottages



















2012

13







2012

16







We are building from prefabricated modular sections (MS) - 1

MS is spatial part of a building where the floor, walls and ceiling of MS are assembled **at the factory**. One MS may include several rooms. Since MS is a „closed“ element, it is possible to complete following **at the factory**:

- to install doors and windows
- to complete **up to 95% of the interior finish of the rooms** (incl. installation of ceramic tiles, floor coverings, mouldings, etc)
- to build **pipng and cable systems within MS** (electricity, water, sewerage, heating, ventilation, security alarm system, TV, fire sprinkler system, etc)
- to install **bathroom fixtures and fittings** (faucets, toilets, bathtubs, sinks, shower cabins, etc)
- to install **kitchen and bathroom furniture and home appliances**
- to complete **most of exterior finishing works** (in case of “light” exterior finishing materials)



We are building from prefabricated modular sections (MS) - 2

We deliver MS to a construction site and mount onto the foundation to form a building. A building may consist of several MS as following:

- detached houses – usually 2 - 4
- blocks of flats – usually 10 or more without limitations

Kodumaja is able to produce MS, which dimensions are within the following limits:

- width - 5,3 m
- length - 14,5 m
- height - 3,8 m

The typical weight of one MS is: **8 – 16 tons**

Time for mounting one MS on a completed foundation is: **20 – 60 minutes**

In case of multi-storey blocks of flats Kodumaja site team is able to mount:
15 – 30 MS a day.

Production at the factory



Factory readiness of interior finishing



Transportation and construction



Example of Kodumaja site work



Block of flats: 56 MS, 28 flats, 4 floors.

Site work: Mounting of MS on a completed foundation, finishing of roof works, connection of cable and piping systems between MS and with the mains, assembling of the balconies and gangways, finishing the connections between the MS from inside and outside.

Total period of site work: 7 weeks where mounting of MS on a completed foundation took 2,5 days.

Average crew during the site work: 14 workers.

NB! The period of site work can be different depending on the project.



As of 31.12.2011 Kodumaja companies have built

apartments in 2 – 5 - storey blocks of flats	3 221
apartments in semi - detached and terraced houses	480
detached houses	234
hotel rooms in hotels	56
Norwegian holiday homes (Norske Hytta)	16
modular room sections for schools and office buildings	66
modular room sections for building the site premises	35



Strategic markets of Kodumaja and built living units (apartments or detached houses as of 31.12.2011)

Norway	3 171
Denmark	361
Finland	116
Sweden	35
Estonia	235
Other countries	17
TOTAL:	3 935

Advantages (1)



Good production conditions = high quality at lower costs

- production does not depend on weather conditions
- the production process is efficient and easily controllable
- there are good conditions for quality control and management



Advantages (2)



Efficient construction method and technology = short construction time at lower costs

- factory production enables a large amount of workforce to be simultaneously engaged
- production at the factory with simultaneous construction of foundations and utility lines on the construction site shortens general construction time and minimises fixed overheads
- high level of completion of the factory-produced modular sections saves time and money on the construction site





Focus on development of flexibility = **readiness for implementation of one-of-a-kind projects at competitive price**

- long experience of developing customer-oriented flexibility
- more experience, compared to the competitors, in the manufacturing of large modular sections and design and construction of 4 and 5-storey apartment buildings from factory-produced modular sections
- an extensive scope of delivery which enables our customers to solve a lot of different problems at once and with one supplier - Kodumaja

Advantages(4)

SINTEF Building and Infrastructure
P.O.Box 1218 Blindern
N-0404 Oslo
Tel: +47 22 58 10 10
Fax: +47 22 49 11 10

SINTEF
MEMBER OF EOTA

Authorised and certified according to Article 17 of the Council Directive 93/37/EEC of 14 June 1993 as the representative of the manufacturer and holder of the rights of the System under reference to construction products.

European Technical Approval ETA-08/0178

Trade name: Kodumaja building modules

Holder of approval: AS Kodumaja
Betsoni 2
Taru 51014
Estonia

Generic type and use of construction product: Timber frame building kits based on prefabricated house modules

Valid from: 29.09.2008
Valid to: 29.09.2013

Manufacturing plants: - Kodumajatehase AS, Betsoni 2, Taru 51014, Estonia
- OÜ KM Element, Ravila 61, Taru 51014, Estonia

This European Technical Approval consists: 17 pages including Annex A1 – All which form an integral part of the document.
Annex B is a separate document which also acts as a part of the ETA.

EOTA European Organisation for Technical Approvals

Compliance with applicable norms and standards = high durability and healthy human environment at competitive prices and low maintenance costs

BUREAU VERITAS Certification

Certification
awarded to:
Kodumajatehase AS
Betsoni 2, 51014 Taru, Estonia
KM Element OÜ
Ravila 61, 51014 Taru, Estonia

Bureau Veritas Certification certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standard detailed below:

STANDARD
ISO 9001:2008
SCORE OF 92/95

SCOPE
DESIGN, PRODUCTION AND CONSTRUCTION OF PREFABRICATED WOODEN FRAME BUILDINGS.

Original approval date: 19 April 2008
Signed by the national authority competent for the application of Management System Accreditation on 19 April 2008
The audit was conducted under the supervision of Bureau Veritas
Further conditions applying to this certificate are the responsibility of the management system and are detailed in the certificate.

15 May 2009
Signature (name): ESTERITA

SINTEF

Teknisk Godkjenning Nr. 2495

SINTEF Bygging
Næringsmiddel- og byggingskontroll og Teknisk Godkjenning AS
P.O. Box 1218 Blindern, N-0404 Oslo

Kodumaja trehusmoduler

1. Beskrivelse av godkjenningsobjektet

2. Produktet

3. Produktbeskrivelse

4. Godkjenningens omfang

5. Godkjenningens gyldighet

6. Godkjenningens utarbeidelse

7. Godkjenningens vedlikehold

8. Godkjenningens opphevelse

9. Godkjenningens oppdatering

10. Godkjenningens opplysninger

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- well-designed, tested and approved structural and technical solutions and materials comply with construction norms and standards in our markets
- certified management system (ISO 9001:2008) helps fulfil contracts with the customers properly and achieve customer satisfaction

- as Kodumaja customers are professional construction companies from Nordic countries, we can pool their vast experience and practices with our own experience

- **Certain limitation in the architectural designs.** Architects must be able to think in terms of prefab modules when designing a building.
- **It is important to make majority of significant decisions regarding the building before the start of the production and construction process.** The production and construction process proceeds at a relatively fast pace. Many later modifications may result in considerable extra costs.
- **Special requirements for transport.** Prefab modules are often oversized cargo and the transport of prefab modules means that you are partly transporting "air".
- **Some customers are sceptical about timber-frame as a building's load bearing structure.**
- **Somewhat increased material consumption.** Prefab modules need stronger structures due to transportation and repeated hoisting. Modular sections has closed structure all around which increases some material costs as well. At the same time it is also giving an extra advantages – solid and strong building, good sound insulation etc.

Deeper analysis may show that seemingly disadvantageous specialities may actually provide certain benefits

KM Element OÜ
(factory - Ravila 61, Tartu, Estonia)





Kodumajatehase AS (factory - Betooni 2, Tartu, Estonia)



Production premises and capacities as of 01.01.2012

Kodumajatehase AS (Betooni 2, Tartu)

KM Element OÜ (Ravila 61, Tartu)

Production premises	8 577 m ² with possibility to increase by 1 127 m ² if reducing material warehouses	14 697 m ² with possibility to increase by 6 800 m ² if building 2 extra production halls
Material warehouses	4 025 m ² incl. 1 036 m ² of non-heated shelters + territory 3 975 m ²	5 722 m ² incl. 944 m ² of non-heated shelters + territory 5 287 m ²
Warehouse territory of finished products	7 024 m ²	21 103 m ²
Rooms for workers (wardrobes, lunchroom, showers)	496 m ²	1 598 m ²
Offices	945 m ²	1 151 m ²
Whole territory	28 641 m ²	75 265 m ²
Production + erection and completion capacity per 1 year (bruto area)	ca 900 MS = ca 33 000 m ² (production of walls, floors and ceilings in 2 shifts)	ca 1 150 MS = ca 42 000 m ² and with increased production premises ca 2 100 MS = ca 77 000 m ²

1. **general contracting companies, companies offering construction project management and real estate developers (ca 95%) – on export markets**
2. **final users of the buildings (ca 5%) – in Estonia**



Kodumaja companies are working usually as ...

- **subcontractor of the customer who performs most of the construction works above the foundations of the buildings – in export projects**
- **real estate developer and builder of “turn key” houses – in Estonia**

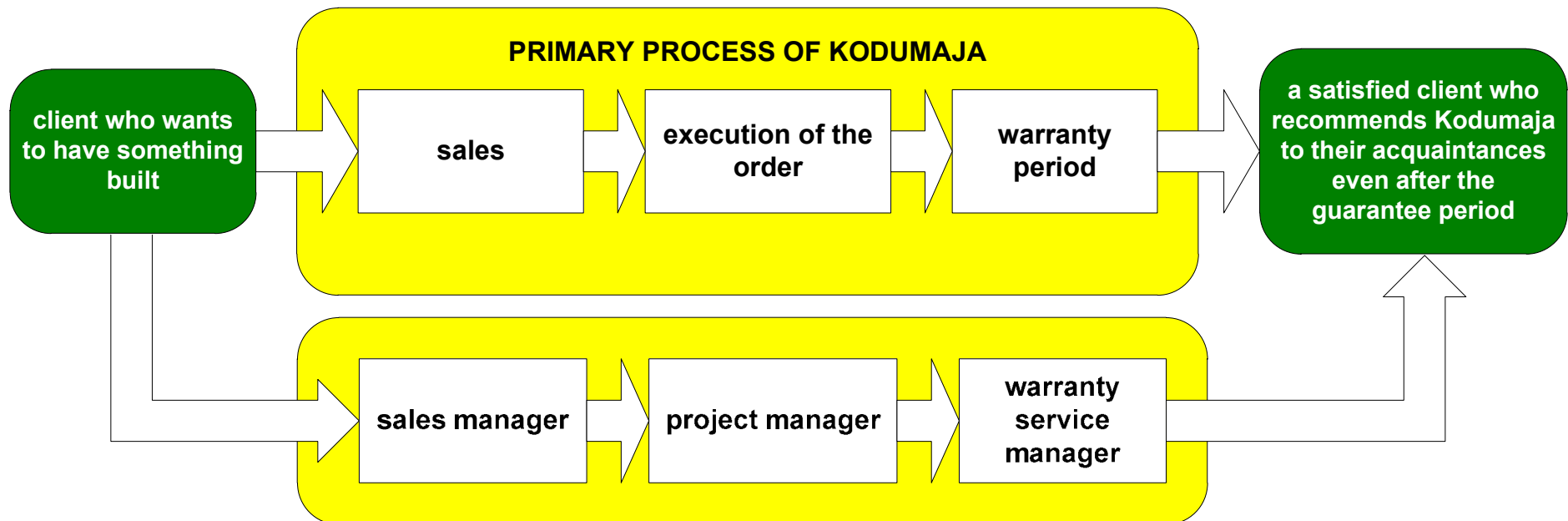


From the customers in export countries Kodumaja companies are expecting usually

1. **Performance of general contractors functions** (coordination of all subcontractors' work, fulfilment of formalities in local governments including obtaining building permits and permits for use, etc.);
2. **Design and construction of foundations and public utility lines by the customer or through subcontractors** (to ensure compatibility of foundations and public utility lines with the building's superstructure, cooperation with Kodumaja is vitaly important);
3. **Due performance of other customer obligations under the contract entered into with Kodumaja resolution of organizational issues, which are reasonable to solve in the export country by local people.**

The composition of a delivery and the division of liability are subjects of negotiations.

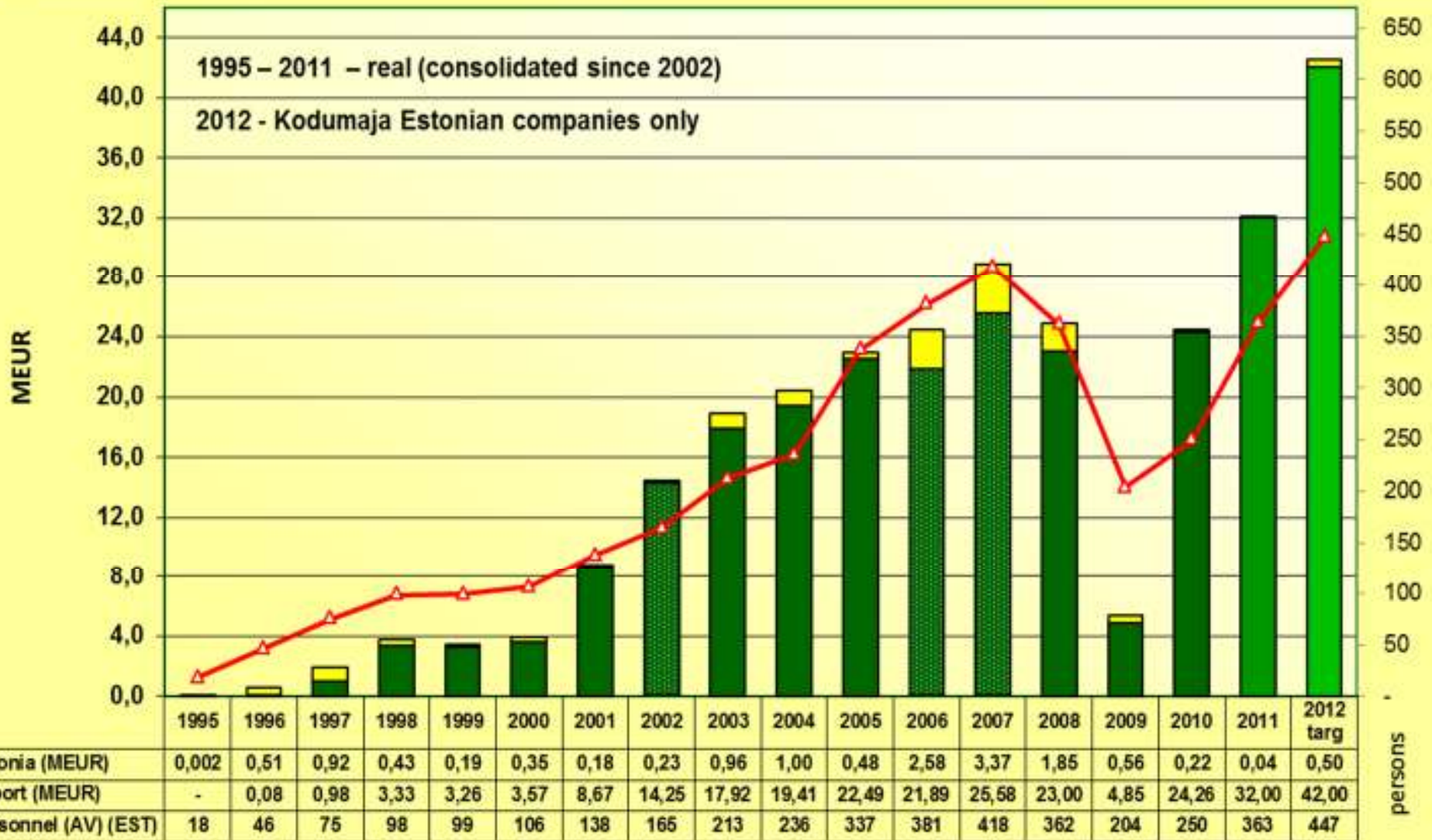
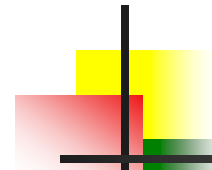
The mutual obligations of Kodumaja company and the customer are established in negotiations and they are specified in sales contracts and their annexes.



Each customer and order is treated as **a separate project**.

In different stages of the primary process the project has **one specific liable person** who also acts as the client's contact.

Turnover and personnel of Kodumaja 1995 – 2012



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