



RMK ANNUAL REPORT 2012



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ANNUAL REPORT 2012



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Estonian state forests and other diverse natural habitats on state land are preserved, grown and managed by RMK (State Forest Management Centre).

RMK's task is to earn profits for the state by managing its forests and, as the largest forest owner, ensure the stability of the timber market. Tasks that do not bring economic profit, but are beneficial in some other way, are equally important: creation of free holiday possibilities, lessons about nature, carrying out nature protection works, etc.

RMK's five fields of activity are:

- Forest administration
- Forest management
- Timber marketing
- Visiting organisation and nature education
- Plant and seed management

More than 800 people work for RMK. Additionally, RMK provides jobs for thousands of people in Estonia under contracts.

Elistvere Animal Park, Sagadi Forest Centre, Tartu Tree Nursery and 70% of the Estonian-Finnish joint undertaking AS Eesti Metsataim belong to RMK.



ISO 14001
 ISO 9001



RMK has been awarded the ISO 14001 environmental management standard and the quality management certificate ISO 9001, as well as sustainable forestry certificates FSC and PEFC.

THE YEAR IN NUMBERS

State land managed by RMK
... of which forest land

1,144,164 ha
852,843 ha

Employees

810

Turnover

EUR 135.8 million

Profit

EUR 19.1 million

Proprietary income to the state budget

EUR 45.8 million

Land tax

EUR 4 million

Area of new forests

6,501 ha

Planted forest plants

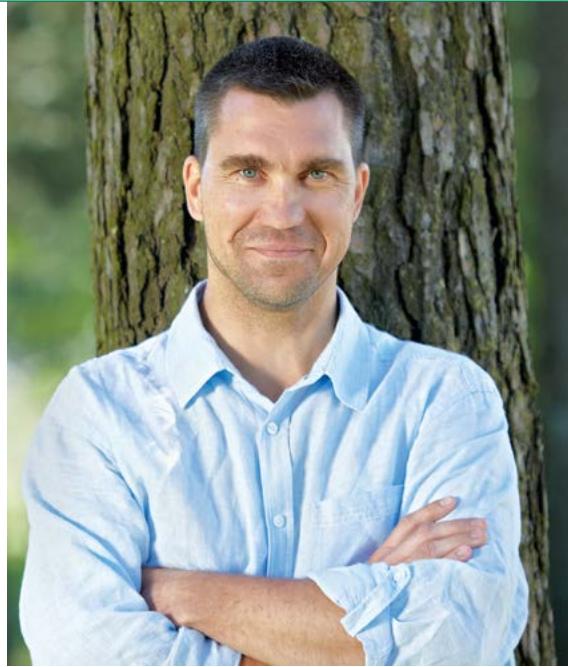
17.4 million

Visits to RMK recreation
and protection areas

1.6 million

ABOUT THE ORGANISATION

ADDRESS BY THE CHAIRMAN OF THE BOARD



Aigar Kallas

On the road

On 15 July, the first group of brave hikers set out on a journey from Oandu, to cross Estonia and reach Ikla in ten days. But everyone knows what the summer was like! By the end of the first day on the road, the completely soaked and muddy hikers jumped into the river of Valgejõgi to “dry” themselves. Next, the tents were put up in a rain which seemed to shoot straight up from the ground, and a dinner consisting of the mushrooms picked during the day was prepared on a kerosene stove. Under a shelter that appeared to be the only dry spot on the Nõmmeveski camping area, people withstood the rain side-by-side until

morning. It was clear that this group was capable of traveling to the ends of the earth!

Fortunately they did not have to go so far, with the 370-kilometre long RMK hiking trail – from Lahemaa to the Latvian border – being crossed on foot, bikes and scooters, in canoes and even on horseback. The opening of the hiking trail was definitely one of the highlights for RMK in 2012. I most definitely urge every Estonian to go travel this road, even if only a couple of kilometres at a time and even if it takes years!

Another road, which RMK can be proud of when looked back upon, is the story of the formation of RMK and state forestry. 2012 marked the 15th anniversary of RMK. To be pedant, RMK was established in 1999 with the Forest Act; however, the actual work of building up the organisation began two years earlier – when the Estonian Forestry Development Programme, started by the Forestry Board, made a proposal to distribute the tasks of the state between different authorities.

These 15 years have been tense and RMK has changed a lot in this time, but we can definitely be pleased with how the organisation is functioning today. We manage the forests in a profitable way, but also in a way that ensures that the forests will continue to provide us with benefits in the future and in volumes comparable to those of today. In addition to the production of timber, it is important for us to keep the state forest open for everyone wishing to gather mushrooms and berries or relax in nature.

2012 will be remembered for the record number of planted trees and the time it took to carry out the regeneration works – altogether 17.4 million seedlings were planted, and this time trees were planted also in the autumn. The production of plants increased, more forest maintenance works were carried out and also more timber was sold than ever before. This, along with profit that exceeded estimates, allowed almost EUR 46 million to be entered into the state budget as dividends and income tax paid on it, which in turn means that the state, as the owner, has never before received more income from RMK in one year.

Of course, profit cannot be measured only in money. The real profitability and wisdom lies in

preserving, using and developing all these values that the state forest can offer. As proof of the well-considered and future-oriented activity of RMK, I would like to point out two circumstances. First, we approved the long-term forest management plans of eight forest districts. And second, we managed to implement the results of the first research projects, supported by the research council of RMK. As with the reconstruction of land improvement systems, we also hope to use the results of modern research works to a greater degree when carrying out other silviculture and nature protection works.

“The forest is more than we are able to measure” are the words of a song, composed together by Vladislav Koržets and Riho Sibul. Despite the fact that, for example, in America, the job of a forest worker is least valued in the surveys carried among people, the more than 4000 jobs created in the state forest make RMK one of the most valued employers in Estonia. In 2012, we learned also that RMK is considered by far the most reliable environmental organisation. We are doing everything possible to be worthy of this trust also in the future!

Most important in 2013:

- Restoration of the spruce seed stock
- Development of a system for taking inventory of the forest and planning the forest management works
- Turning nature protection works into a core activity of RMK, alongside forest management.

TOP EVENTS

In January ...

... RMK signed a cooperation agreement with Kõrvemaa Neliküritus, which over the next three years will bear the name of RMK Kõrvemaa Neliküritus (RMK Kõrvemaa Complex Event).

... RMK hosted in its snowy forests kindergarten and school children, who were introduced – through a free learning programme – to the wonders of a snowy forest.

In February ...

... Scientific research, funded by RMK, was introduced at the research seminar in Tartu. A similar seminar was arranged in cooperation with the Doctoral School of Earth Sciences and Ecology, a joint project between universities, in December.

... The Estonian Union of Persons with Mobility Impairment thanked RMK for also making the nature trails passable for people using mobility support devices.

... The international FSC forest certificate granted to RMK was extended for the next five years.

... An exhibition “Aha, take an ice-cream to the forest!?” was opened at the Tallinn branch of the Science Centre AHHA, where one could wander around in the RMK model forest and discover the historical ice-cream machines.

In March ...

... Toomas Hendrik Ilves presented the President’s Folklore Award to Triin Kusmin, RMK’s heritage culture specialist.

... The RMK interactive forest quiz for schools also took place in Russian for the first time; in which altogether 8762 students from 225 schools participated.

In April ...

... Spring nature study programmes took the youth to the forests to get acquainted with the emerging spring as well as the forest works.

... A record number of trees were planted in the state forest. Altogether 17.4 million trees were planted; almost one million of them in the autumn.

In May ...

... The 15th nature photo competition “Bloodless Hunt” took place, the best shot of which was an underwater photo of a pike taken by Kaido Haagen.

... RMK was granted three advertising campaign awards at the 2011 “Golden Egg” competition.

... The season for conservation camps for volunteers kicked off; during the year RMK together with Estonian Fund for Nature hosted 20 camps where over 300 volunteers participated.



Ski marathon of RMK Kõrvemaa Neliküritus



Forest stop



Nature trail in Nõva



Triin Kusmin



Volunteers in Mustoja



Winner of “Bloodless Hunt”



RMK hiking trail



Reforestation



Mushroom days in the Praali forest house



Binocular and Vernier LabQuest data logger at the Sagadi Nature School



Study class of Sagadi Nature School



Loona manor

In June ...

... A student from the Estonian University of Life Sciences, Kaupo Valb, was granted an RMK award worth EUR 700 for his master's thesis written on the topic of wood chips.

In July ...

... A 370-kilometre RMK hiking trail that crosses Estonia was opened, the preparation of which took more than ten years.

In August ...

... The 9th Wood Days took place in the RMK Sagadi Forest Centre, which this time attracted about a thousand interested people.

... An information board "A hundred shooting locations of the century" was opened, within the framework of the project Estonian Film 100, at the Sagadi manor park.

... The Supervisory Board of RMK decided that Aigar Kallas will continue as the Chairman of the Management Board for the next 5 years. On his proposal, Tavo Uuetalu and Tiit Timberg

were also reappointed as Management Board members.

In September ...

... The most competitive companies in Estonia were honoured – RMK earned first place in the agricultural and forestry enterprises category and placed sixth in the overall list.

... Mushroom days were held in the RMK nature centres and mushroom exhibitions were organised.

... Eight RMK forest districts received their long-term forest management plans until 2021. The plans for the remaining nine forest districts will be completed in spring 2013.

In October ...

... The completely renovated Sagadi Nature School opened its doors to visitors.

... The Estonian Institute for Sustainable Development acknowledged the promoters of the green economy; RMK

was acknowledged from among state enterprises.

In November ...

... A complete book on the formation of state forestry and RMK "RMK 15 – metsaks kasvamine" (RMK 15 – growing into a forest), by Vaike Pommer, was published.

... RMK awarded EUR 16,000 in the form of scholarships to the master's and doctoral students of the Estonian University of Life Sciences.

... Loona manor, located in Vilsandi National Park, and where the centre of the national park and the RMK information point are located, underwent a thorough renovation.

In December ...

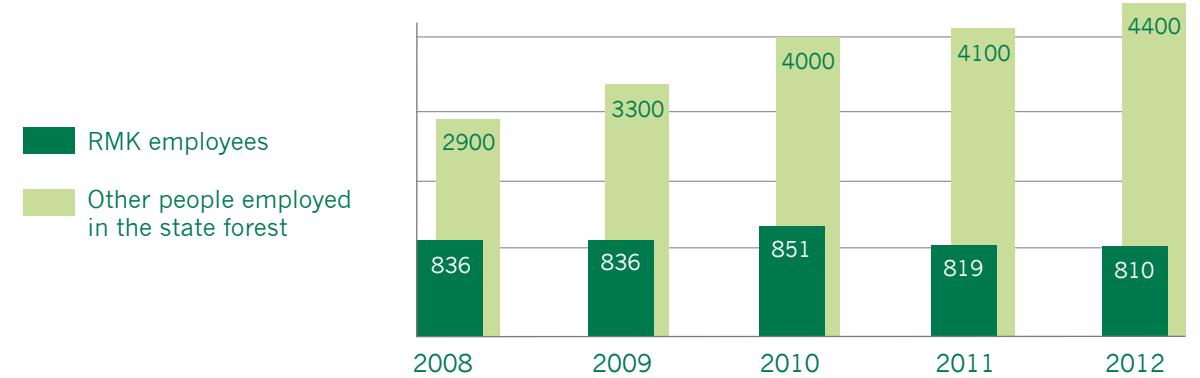
... The RMK mobile app for finding a suitable Christmas tree was completed.

... More than 7600 Christmas trees were brought into Estonian homes.



EMPLOYEES

Number of people employed in the state forest



Employees by position

345 Foremans/foresters

296 Workers

119 Specialists

50 Managers, forest managers

Supervisory Board members of RMK

as of March 2013:

- Rita Annus
- Jaanus Tamkivi
- Andrus Saare
- Liisa-Ly Pakosta
- Tõnis Kõiv
- Mati Polli
- Ivar Sikk
- Andres Talijärv

HONOUR BOARD

Over the year, RMK and its employees received several wonderful acknowledgements.

High rank in the list of competitors

At the Enterprise Estonia competition “Competitiveness Ranking 2012”, RMK earned a solid first place in the Agriculture and Forestry category. In the overall competitiveness ranking of Estonian companies, RMK ranked sixth.

The top-list is compiled by the Estonian Chamber of Commerce and Industry and the Estonian Employers’ Confederation. The tenth ranking compared more than 500 Estonian companies. The awards were presented during a festive ceremony at the Estonia Concert Hall.

Awards for the year of Forests’ campaign

The RMK 2011 campaign “See You in the Forest!” received three awards at the creative communication competition “Golden Egg 2012”. The holistic solution of the Year of Forests campaign was recognised with a golden egg in the radio and outdoor media category; the special solution “Forest stop” was granted a silver egg.

According to the chairwoman of the panel, Olga Peresild, who assessed the complete solutions, the RMK campaign was the absolute favourite of the panel, since the message was put to life in so many different media channels. “It is difficult to imagine a person passing a bus stop, without noticing the spruce trees planted on its roof.

Or a person who would disregard the tracks left by animals on the streets that led to the forest exhibition,” Peresild said. The awards were presented at the Pärnu marketing conference.

In addition, the RMK Year of Forests campaign was declared to be worthy of the main prize in the “Media Deed of the Year 2011” at the marketing conference Password, and was also named the best in the branding category.

The campaign Creative Solutions was developed by the advertising agency IDEA, and the media campaign by the media agency Mediapool Vizeum.

President honoured a heritage culture specialist

President Toomas Hendrik Ilves presented Triin Kusmin, heritage culture specialist in RMK’s Nature Protection Division, with the 2011 Folklore Collection Award of the President of the Republic of Estonia.

Triin Kusmin has been engaged in heritage culture with RMK since 2004. During that time, she has thoroughly and devotedly investigated forestry heritage culture and considerably expanded the horizon of her colleagues as well. On the basis of heritage culture inventories, Triin has compiled several books which open up a new aspect for visitors to recreation areas, which they can discover when moving around in nature. Altogether, four people received such a high recognition from the president.

RMK promoting green economy

The Estonian Institute for Sustainable Development acknowledged the promoters of the green economy operating in Estonia; RMK was singled out from among the state enterprises. When handing over the award, the possibilities for the public use of state forests offered by RMK, and sustainable forestry standards and environmental management system implemented within the company, were praised. The Estonian Institute for Sustainable Development presented the awards for the first time. These were handed over at the Sustainable Development Forum, with top-level speakers.

SURVEYS

Credibility and care

The 2012 surveys indicate the strong position of RMK as an employer and actor in the area of the environment.

According to the TNS Emor survey “Employers’ reputation and employees’ expectations”, RMK is still the most valued employer, both in rural areas as well as among employed people. RMK shared first place with Enefit.

From the study on the environmental awareness of residents of Estonia, conducted by Turu-uuringute AS, it appeared that RMK holds the indisputable position of leader as an environmental organisation. RMK was considered the most reliable environmental organisation in Estonia; with its position having improved notably in comparison with the situation two years ago. By ranking according to

Gratitude of the people with mobility impairment

At their annual recognition event, the Estonian Union of Persons with Mobility Impairment recognised RMK for also making many of the nature paths and recreation objects accessible to people who use mobility support devices.

RMK will continue to engage in the development of infrastructure for assisting the movement of people with special needs in nature. For example, in the nature centres, more attention is paid to entrances, toilets and movement in displays; in nature, we consider access to observation towers and hiking trails to be important.

a prescribed list, RMK was followed by the Estonian Meteorological and Hydrological Institute, the Environmental Inspectorate, Estonian Environment Information Centre, Land Board, Environmental Board and the Ministry of the Environment.

TNS Emor examined how the reputation of RMK has changed compared to the last two years. It turned out that the reputation had become clearer, since people were able to spontaneously describe both the fields of activity of RMK as well as the emotions related to the organisation. The strongest characteristics of the reputation were considered to be reliability and care; assessing the efficiency of RMK’s activity caused the most hesitations among the respondents. Establishment of recreational areas and hiking trails were even more positively pronounced.

COOPERATION PROJECTS



Healthy lifestyle

RMK launched cooperation with Kõrvemaa Neliküritus, one of the most popular recreational sports event series in Estonia. The complex event includes a ski marathon, spring run, triathlon and a bike race, and over the next three years it will be bearing the name of RMK Kõrvemaa Neliküritus.

In 2012, more than 3500 adults and 600 children participated in the event. Taking part in the RMK Kõrvemaa Neliküritus is practicable for everyone who wants to spend a sport-filled weekend in nature. The series of events takes place on the varied and picturesque landscape of North Kõrvemaa, on the lands and in the forests managed by RMK.

Another cooperation of a wider scope ties RMK with the foresters' male choir Forestalia, which in 2012 celebrated its 40th anniversary and gave concerts on this occasion in Rapla, Viljandi and Tartu.

In addition, RMK supported the following events and organisations:

To promote forestry and the use of timber:

- MTÜ Halulaev, construction of a historical two-mast schooner

- Estonia's logging championships
- Estonian Forest Society, organisation of the week of forests
- Varbola Wood Days
- Estonian Woodhouse Association, contest for professional log home builders

To increase nature awareness and environmental care:

- Eco Media (www.bioneer.ee)
- Bloodless Hunt
- Schilling – the Festival of Beautiful Music Eesti Kontsert
- Love Film Festival tARTuFF

Youth projects:

- Youth conference “A Cool School Day”

To reach Russian residents, cooperation was launched with Radio 4 and newspapers MK-Estonia and Põhjarannik, with regular programs or columns on forestry issues. In cooperation with MK-Estonia and TV channel Pervõi Baltiiski Kanal, the second forest planting bees were arranged. RMK participated with its forest tent in the whole family event “Miners' Day”, in Toila Oru Park, and donated beautiful Christmas trees to the more important Russian cultural centres in Tallinn.



The complex event RMK Kõrvemaa Neliküritus includes a ski marathon, spring run, triathlon and a bike race. Almost 1500 fellow sportsmen attended the spring run.

THE YEAR IN NUMBERS

State forest reserve 153 million m³
Renewed forest area 6,501 ha
Planted trees 17.4 million

Clearance 16,481 ha
Thinning 11,895 ha
Regeneration cutting 8,606 ha

Sold timber 3.1 million m³
... from which forest material 2.8 million m³
... from which wood chips and residuals 0.3 million m³

Income from the sale of timber EUR 131.4 million
... of which forest material made EUR 121.2 million
... of which sale of wood chips and residuals EUR 10.2 million

Realized forest seed 1,068 kg
New stocked seed 663 kg
Total balance of seeds 2,750 kg

Reconstructed and renewed draining systems 9,914 ha
Total draining systems managed by RMK 444,205 ha
Reconstructed and renewed forest roads 226 km
Total forest roads managed by RMK 8,107 km
Investments into forest improvement works EUR 15.8 million



FOREST MANAGEMENT

STATE FOREST RESERVES



FOREST LAND OVERVIEW

RMK area of forest land and reserves by species of trees

Species	Area		Stock		
	ha	%	m³	%	m³/ha
Pine	373,001	43.7	74,605,000	48.8	200
Birch	248,175	29.1	39,823,000	26.1	160
Spruce	178,432	20.9	29,066,000	19.0	163
Aspen	27,979	3.3	4,951,000	3.2	177
Black alder	13,372	1.6	2,556,000	1.7	191
Grey alder	7,884	0.9	1,113,000	0.7	141
Others	4,000	0.5	676,000	0.4	169
Total	852,843		152,790,000		179

FOREST MANAGEMENT PLANS

Forest Districts received development plans

Eight RMK forest districts received long-term forest management plans; the remaining nine will be completed in spring 2013.

The development plans provide an overview of the resources of state forest of the given area, of the planned cutting volumes, use of land, silviculture and planting quantities, nature protection and recreational possibilities.

The main principle of RMK in managing the state forest is to do so in a way which also ensures that

future generations can use the benefits of the forests at least within the same extent as we do today. The development plans help to introduce the activity of RMK in a longer time horizon and serve as confirmation of its sustainability.

The first eight forest management plans were prepared for the Läänemaa, Lääne-Virumaa, Põlvamaa, Pärnumaa, Raplamaa, Valgamaa, Võrumaa and Vändra forest districts. To introduce the plans, county information days were organised for the stakeholders; the documents are available on the RMK website as well as in the forest districts.

CUTTING WORKS

Cutting in state forests (ha)	2008	2009	2010	2011	2012
Regeneration cutting	6,068	7,324	8,293	8,340	8,606
Thinning	9,308	8,597	11,136	13,602	11,895
Sanitary cutting	3,461	7,610	6,174	7,487	10,362
Selection cutting	9	0	2	0	0
Deforestation	905	702	421	1 107	551

REFORESTATION

Volume of forest renewal	2008	2009	2010	2011	2012
Soil mineralization, ha	3,500	3,585	4,120	5,226	4,426
... incl. to promote natural renewal	287	504	249	529	446
Total sowing and planting, ha	4,886	4,211	4,410	4,930	6,188
... of which sowing, %	16	13	20	8	9
... of which planting, %	84	87	80	92	91
Helping natural renewal, ha	141	141	217	258	313
Supplementing forest renewal, ha	1,768	1,630	2,177	2,197	2,205
Planted seedlings, million	10	10	10	13.4	17.4
... of which container seedlings, %	40	34	33	36	26
Maintenance forest renewal, ha	13,700	12,057	13,391	15,978	18,751
Maintenance of young stand (ha)	2008	2009	2010	2011	2012
Clearance	14,013	12,220	14,121	15,624	16,481
Forest renewal by the main tree species (ha)	2008	2009	2010	2011	2012
Spruce	2,838	2,621	2,473	2,802	3,169
Pine	1,679	1,393	1,828	1,951	2,905
Birch	476	313	294	413	399
Others	34	24	27	23	28

17 million trees

While the scope of reforestation remained at the level of 10 million trees per year for quite a while, then over the last two years these figures have recorded an upsurge. In 2012, already 17.4 million new trees were planted.

Most of the trees were planted in spring; however, in order to revive an old tradition, forest planting was undertaken also in autumn, when approx. 800,000 spruces were planted.

More than a half of the trees planted in the forest are pines (9.5 million seedlings), followed by spruces (7.2 million), birches (0.7 million) and to some extent also oaks and alders.

The volume of renewal cutting of state forest in the next decade will be approx. 8500 ha per year. RMK develops new forest by planting, seeding or leaving it to the natural renewal process. Pines are grown on 37% of the cutting areas, birches on 30%, spruces on 26% and aspens and alders on 7%.

Seedlings, which are required for renewing the state forests, are grown in six RMK nurseries, in the Tartu Tree Nursery, and the Estonian-Finnish joint undertaking Eesti Metsataim.

Developments in plant production

In spring, the first pines, seeded in 2011 from the carefully selected seeds of the trees with best qualities, were planted on four testing areas all over Estonia, within the framework of the RMK forest tree breeding programme. Growth of the plants of the progeny trials are monitored and measured over the course of 15 years; the plants with the best qualities are selected for cultivation and will serve as the foundation for future forest regeneration.

The RMK forest tree breeding programme is implemented in cooperation with the Estonian University of Life Sciences, and its purpose is to increase the productivity of forests and preserve the best genome. Progeny trials for spruces and white birches are also planned to be launched in the future.

A significant change took place in the plant growing technology – the open-area seeding of spruces was replaced with greenhouse seeding, which enables the use of approx. 30% less seeds for growing the same number of plants and also provides an opportunity for cutting maintenance costs.



TIMBER MARKETING

Timber market is tense

In 2012, there was practically no improvement in demand on the timber market; with an exception being logs for sawmills, the demand for which was higher than before. Demand for firewood and pulpwood was volatile and the prices were in decline; however, at the yearend, the situation with birch pulpwood still improved. Price erosion was compensated by increased production volumes and, in terms of quantity, RMK managed to sell the highest annual quantity of forest material ever – 2.8 million m³.

In addition, RMK sold 0.3 million m³ as wood chips and residuals, which is used in combined power and heat plants for producing electricity

and heat energy. Compared to 2011, this is 8% less, a result of the decision by former major client Eesti Energia to stop burning wood chips in the Narva Power Plants. Accordingly, the key issue of the near future will be finding new sales possibilities for the low quality wood, including chips.

The average sales price of wood was approx. 6% lower than forecasted – being 42.9 EUR/m³ for forest material, 34.1 EUR /m³ for chips and 12.3 EUR/m³ for residuals.

Logs made up 40%, pulpwood 37%, firewood 13% and wood chips and residuals 10% of the sales volume of 2012.

Sale of timber

(m ³ , %)	2008	2009	2010	2011	2012
Logs	992,000 47%	1,084,000 46%	1,152,000 41%	1,227,000 41%	1,249,000 40%
Pulpwood	777,000 37%	939,000 40%	1,174,000 41%	1,151,000 38%	1,158,000 37%
Firewood	323,000 15%	259,000 11%	250,000 9%	294,000 10%	399,000 13%
Wood chips and residuals	21,000*	71,000 3%	268,000 9%	330,000 11%	318,000 10%

* only residuals

Biggest clients by the amount purchased (m³)

Stora Enso Eesti AS	335,000
Horizon Tselluloosi ja Paberi AS	214,000
Metsä Forest Eesti AS	199,000
Estonian Cell AS	175,000
Eesti Energia Narva Elektriijaamad AS	166,000
Toftan AS	96,000
Helme Graanul OÜ	93,000
Södra Eesti AS	86,000
Laesti AS	86,000
Repo Vabrikud AS	81,000



Average price of the sold timber (EUR/m³)



EXTRACTION OF SAND AND GRAVEL

Sand and gravel extraction (m³)

Year/Quarry	Karujärve gravel quarry	Pajaka earth materials quarry	Taganõmme sand quarry	Voola sand quarry	Total
2008	3,328	2,550	3,610		11,963
2009	4,022	7,497	12,098		23,617
2010	7,741		18,012		25,753
2011	8,000		33,658		41,658
2012	7,239	2,920	12,930	10,931	34,020

AFFORESTATION OF QUARRIES

Turning the quarries green

In 2012, RMK afforested three exhausted quarries, where 143 ha of new forest were planted. On request of the Kiviõli Oil Shale Processing & Chemicals Plant and Eesti Energia Mining, oil shale quarries were forested, with 24 and 106 ha respectively. In the sand and gravel quarries,

where the works had been finished, trees were planted on 2 ha; the client was AS Eesti Teed.

RMK has been engaged in the afforestation of quarries since the establishment of the organisation; depleted mining and quarrying areas have been restored on more than 10,000 hectares.

WASTE COLLECTION

Waste collection in state forests	2008*	2009	2010	2011	2012
Amount (kg)	150,0000	250,000	146,000	317,000	170,000
Expenses (EUR)	17,300	31,300	21,000	32,000	29,000

* Includes the trash collected during the day of civil actions "Let's do it!", RMK also supported the initiative financially

Waste around cities

The quantity of waste taken away from the forest has decreased over the years; however, the problem remains serious in the periphery of cities. The littering list is topped by Harju and Ida-Viru County, followed by Tartu, Valga and Jõgeva Counties. Pollution is often local, there are single large sites filled with litter, especially near the cities.

In other places the pollution has decreased year from year. The implementation of the organized transport of waste and cleaning and notification campaigns have most definitely played a role, with impacts to

be seen now. In quantity terms, most of the waste is simple garbage (154 tonnes), followed by hazardous waste (11 tonnes), glass (3 tonnes) and a small quantity of metal waste. The quantity and nature of waste depends on the processes taking place in society – for example, during the construction boom years there was a lot of building waste; today there are also fewer tyres in the forests, compared to previous years.

In 2012, RMK spent EUR 29,000 to remove the waste. Most expensive is the transferring of hazardous and unsorted waste; in several places, RMK is also using the help of subcontractors to manage the waste.

FOREST FIRES

Forest fires in state forests	2008	2009	2010	2011	2012
Number (pcs)	25	20	13	12	0
Area (ha)	837.2*	32	19	13.7	0
Average fire area (ha)	33.5**	1.6	1.5	1.1	0

* Including the Vihterpalu fire, 803.7 ha

** Excluding the Vihterpalu fire, 1.4 ha



HUNTING

Hunting quota stable

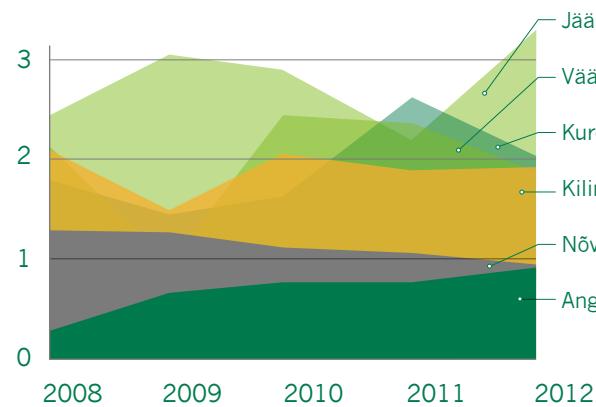
Already for the second year in a row RMK did not provide hunting service on its land, but instead sold game hunting permits at an auction in six hunting districts. The hunting permits of 32 hunting districts were put on sale as a package; EUR 261,000 was received from the sale, which is approx. one-third more than in 2011.

876 big game were hunted on the RMK lands: 574 wild boar, 239 elk, 45 red deer, 17 wild deer and 1 lynx. The maximum hunting quota of elk was filled within 96% (248 specimens), minimum hunting quota of red deer within 100% (45 specimens) and minimum hunting quota of wild board within 146% (396 speci-

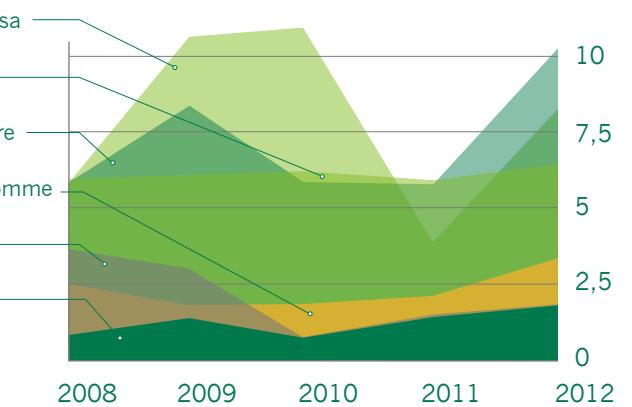
mens). Compared to the last five years, it can be pointed out that the hunting quota per 1000 ha has remained stable.

There are 155,600 ha of hunting grounds at the disposal of RMK, 23% of which belong to private land owners. The land in private use, which is at the disposal of RMK, is hunted upon only with the permission of the land owner. In 2012, RMK obtained permission to hunt in respect to 65 immovables (3159 ha); hunting was prohibited on 49 immovables (1133 ha). EUR 2400 were paid to the private land owners for the possibility to hunt there.

Hunting per 1000 ha of hunting area, moose



Hunting per 1000 ha of hunting area, wild boar

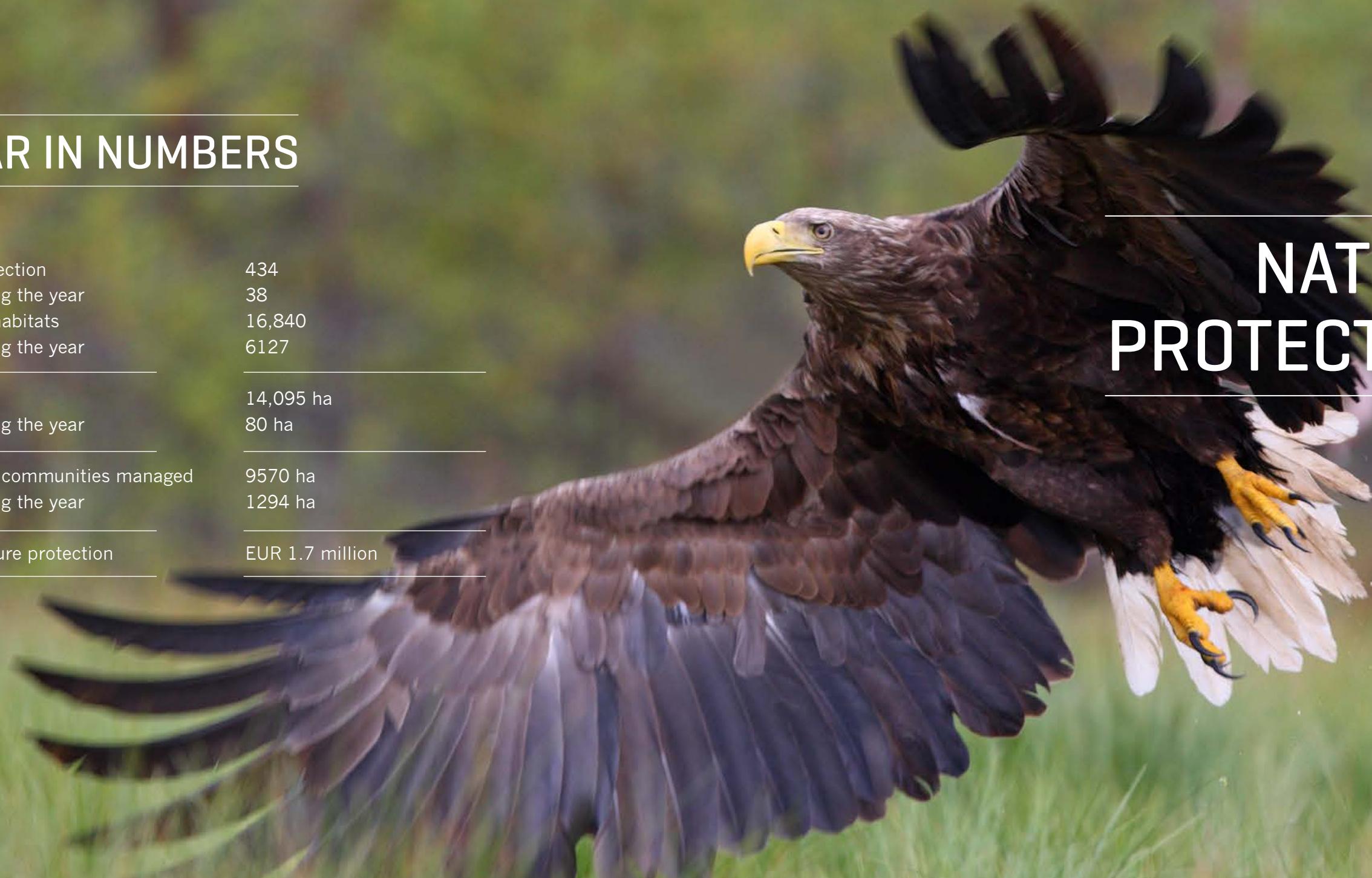


From March 2011, hunting is allowed in the six hunting areas of RMK based on the hunting rights acquired at public auctions. In 2012, a total of 239 elk were hunted on the hunting areas of RMK.

THE YEAR IN NUMBERS

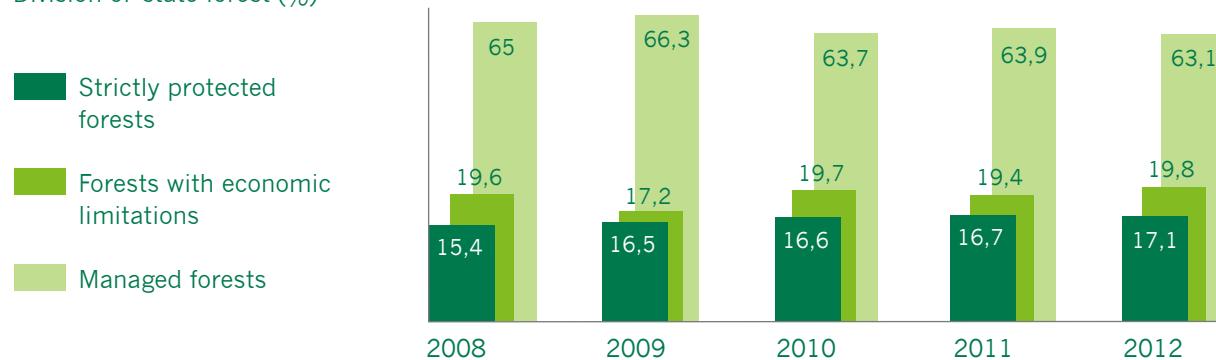
Species under protection	434
... incl. added during the year	38
Protected species habitats	16,840
... incl. added during the year	6127
Key biotopes	14,095 ha
... incl. added during the year	80 ha
Semi-natural biotic communities managed	9570 ha
... incl. added during the year	1294 ha
Expenditure on nature protection	EUR 1.7 million

NATURE PROTECTION



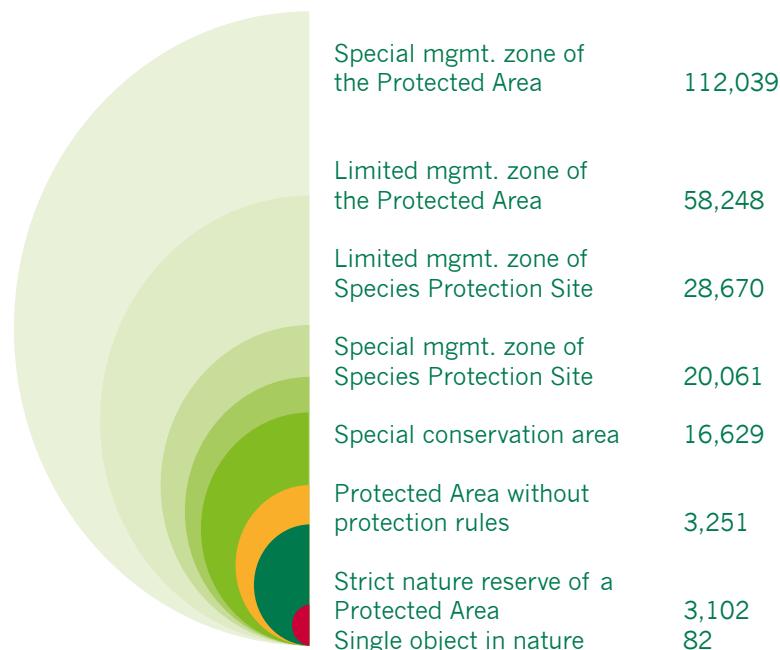
DIVISION OF STATE FOREST

Division of state forest (%)



PROTECTED AREAS

Protected Areas in state forests (ha)



SPECIES UNDER PROTECTION

38 new protected species

A total of 434 protected species are registered in RMK's areas, 38 of which were first recorded in these areas in 2012. Correspondingly 3 and 22 of the most strictly protected species of categories I and II were discovered, and 13 species of category III, with a less strict protection regime, were registered. An important indicator was the habitats of the protected species, where a habitat is the growth place of a specimen of a species or for plants that grow in groups, the growth place of a group, the nesting place of birds, etc. As at 2012, there were 16,840 protected species habitats in total in RMK's areas, with 6127 new habitats discovered during the year. The more detailed information we have about the habitats of protected species, the better is the

knowledge about their population number and the more resultant is their protection.

The significant increase in the number of habitats of protected species is due to the active cooperation between species experts, the Environmental Board and the Estonian Environment Information Centre, as well as an increase in the overall area of RMK's lands.

A total of 46 nesting trees of protected birds were found in RMK's areas in 2012, which is twice as many as the year before. In cooperation with MTÜ Kotkaklubi, the nests of 12 goshawks, 9 white-tailed eagles, 8 fish eagles, 6 lesser spotted eagles, 5 black storks and 6 other protected species were identified.

New species that have been placed under protection

Protected category I:	Protected category II:	Protected category III:
amylocystis lapponica, rhodotus, lesser white-fronted goose	frosted bat, greater bur-marigold, andreaea moss, lesser saltmarsh sedge, iodine bolete, seaside brookweed, vulpicida tubulosus, sea wormwood, greater scaup, plagiopus oederi, witch's hair, dark purple earth tongue, pyramidal orchid, sea pearlwort, bugle, bacidia biatorina, sandwich tern, spiny naiad, scaly breck lichen, cladonia convoluta, little crane, pyrenula nitidella	phragmatobia luctifera, eagle's claws, straw beard lichen, crosswort, lousewort, gibbous duckweed, Indian feather moss, fishscale lichen, sclerophora pallida, orobanche bartlingii, lapland ringlet, barn swallow and the common European frog

KEY BIOTOPES

Equal protection

As at the end of 2012, there were 5715 key biotopes with a total area of 14,095 ha on RMK's lands, of which 5541 ha was formed by key isotopes that correspond to the Forest Act, and 8554 ha by areas with the elements of key biotopes. RMK also views the areas with the elements of key biotopes as key biotopes and ensures equal protection on these areas.

A key biotope is an area of up to seven hectares that needs protection, is located outside of a protected nature object and is highly likely to accommodate endangered, possibly endangered or rare species.

NATURE PROTECTION WORKS

Clear directions from the development plan

In 2012, the Government approved the Nature Conservation Development Plan until 2020, the objectives set out in which are directly related to the RMK's activity.

1) Protection of endangered species, with special emphasis on capercallie and the flying squirrel, previous protective measures for which have not been successful. To determine the habitat requirements of a forest and achieve a favourable state of the population, RMK initiates thematic applied research. For the flying squirrel, the key issue is the preservation of habitats along with the connecting corridors between them. For that, RMK is developing a methodology for the protection of habitat corridors and ensures the protection of these corridors around flying squirrel habitats located on state lands.

2) Favourable condition of habitats. In restoration and maintenance of semi-natural biotic communities, RMK turns the most attention to wooded

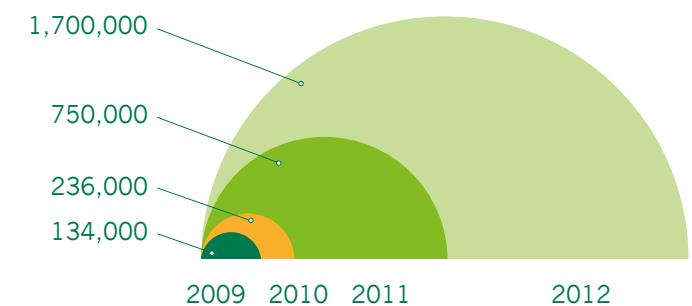
meadows and alvars. Priority areas in the restoration of swamp habitats are Soomaa National Park and the Endla, Muraka and Alam-Pedja nature conservation areas.

3) Protection of biodiversity in economic forests. To ensure the above, old crop trees and down timber are preserved on regeneration cutting areas, along with valuable biotic communities on the edges of open landscapes and water protection zones, the potential impact of the activities planned during forestry improvement works on biodiversity are assessed, and the springtime cutting reduction is observed.

4) Development of the infrastructure of protected areas by building or reconstructing roads, bridges, entry and exit ways, etc. Marking of protected areas, maintenance and display of the protected parks and single objects (e.g. Keila-Joa and Toila Oru parks) will continue.

Cost of nature protection works

Expenditure on nature protection works in 2012 reached EUR 1.7 million, with 90% of the money coming from the European Regional Development Fund and the rest from the means of RMK.



ERDF projects

The largest nature protection works financed by the European Regional Development Fund (ERDF) that were completed in 2012 were reconstruction of the Laeva-Palupõhja Road, and restoration of the forest park in Sangaste.

Reconstruction of Laeva-Palupõhja Road, on the Alam-Pedja Nature Conservation Area, was necessary to ensure access to the flooded meadows around Palupõhja Village. These meadows are habitats of Europe-wide importance and require regular maintenance. The road is also important for maintenance of the infrastructure that guides visiting to the protected area, managing of the Palupõhja Nature School, and ensuring of supervision and scientific work on the protected area.

In the course of the works that cost EUR 780,000, 10.6 km of road covering was renewed, new exit ways built, water culverts installed and ditches and ditch embankments were cleaned.

Restoration of the most biologically rich forest park in Estonia, in Sangaste, cost EUR 35,000, and in the course of the works the area around the pond was cleaned of brushwood, and unviable and

dangerous trees were cut. In the upcoming years, constant maintenance should be accompanied by the planting of foreign tree species in different sections of the park, following the original concept of the park.

The forest park area of Sangaste manor covers 37.5 ha and forms a scenic whole with the Sangaste manor and its main building. The forest park was established by count Friedrich von Berg, who attempted to study the growth of tree species from different regions of the world at Sangaste. The tree seeds he brought back from his travels started the most biologically diverse forest park in Estonia.

In addition, restoration works of Kuresoo, Rannu and Viru bog were started; as well as restoration of the natural water regime at the Endla Nature Conservation Area, and reconstruction of Raba Road at Soomaa National Park. These works will continue in 2013.

In total, 17 ERDF projects were dealt with in RMK's Nature Protection Department and the Nature Protection Division in 2012, and two more were funded by the ERDF. In 2013, work will continue on 12 projects.



In cooperation with the Estonian Fund of Nature, RMK organised 20 conservation camps, during which the habitats of protected species, semi-natural biotic communities and valuable landscapes were restored and maintained with the help of volunteers. On the photo the volunteers are restoring the alvar on the Rumpo Peninsula in Viisandi.

Works from RMK's own funds

From its own funds RMK carries out mainly species protection, and the maintenance and restoration of biotic communities.

Specific species protection works were carried out on 28 areas, the most noteworthy being:

- improvement of the condition of amphibian habitats and spawning water bodies. The most extensive works were carried out in Suursoo, in Lääne County, to improve the habitat of the natterjack toad, in the Piusa sand mine to improve the permanent habitat of the great crested newt and the habitat of the sand lizard, and in Lahemaa National Park where the habitat requirements of amphibians were taken as the main consideration when restructuring the sand deposits.
- improvement of the habitat condition of protected plant species. The most important works took place in Kõrgessaare, in Hiiu County, in Varangu and Ohepalu in Lääne-Viru County, and in Mustoja, in Põlva County, to improve the habitat conditions of orchids.

More than 2000 volunteer hours

In 2012, for the first time, RMK carried out nature protection activities in the form of civil action, in cooperation with the Estonian Fund for Nature. In total, ten one-day and ten multi-day conservation camps were held on state land, during which the habitats

Semi-natural biotic communities for rent

In 2012, RMK gave 185 plots of land, with a total area of 1294 hectares, to the use of other persons to restore and maintain semi-natural biotic communities. It increased the area of semi-natural biotic communities to be maintained on state land to 10,000 hectares. The most voluminous restoration and maintenance works are taking place in Lääne County and Saare County.

The other species protection works across Estonia were aimed at improvement of the habitat condition of several endangered and rare plant, butterfly, amphibian, and lichen species.

Semi-natural biotic communities and valuable landscapes were restored and maintained on a total of 230 hectares, the most important of them being at Pirita River Valley Landscape Protection Area, Otepää Nature Park, Põhja-Kõrvemaa Nature Conservation Area and in West Estonia and Hiiu County.

As to planning, important milestones were the construction project for restoring the border areas of Muraka Bog, designing of the infrastructure needed to manage the meadows at Matsalu National Park, and reorganisation of two sand deposits at Lahemaa Nature Park, taking into consideration the habitat requirements of amphibians. Also, a uniform database on the markings of Estonian protected areas was formed.

of protected species, semi-natural biotic communities and valuable landscapes were restored and maintained. In total, 326 people took part in the civil actions, contributing 2210 working hours to preservation of the nature protection values of state land, and also gathering a lot of knowledge in the course of their work.

Starting from 2012, RMK is organising the necessary restoration cuttings of semi-natural biotic communities itself. The task of the land user is to carry out the smaller restoration works (cutting of brushwood, milling of tufts) and all maintenance works (mowing or herding) throughout the contract period. The contracts for land use for maintenance of biotic communities are entered into for 10 years.

THE YEAR IN NUMBERS

Number of visits to RMK's recreational and protected areas	1.6 million
Recreational areas	13
National parks	5
Other nature reserves with a visiting infrastructure	40
Information points	27
Nature centres	18*
Nature houses	4
Nature schools	1
Visitors	
... to information points	72,000
... to Elistvere Animal Park	54,800
... to Sagadi Forest Museum	28,600
Participants in nature education programmes	59,900
Cost of nature holiday and education	EUR 6.4 million

* As of April 2013, RMK has 14 active nature centres.

VISITING ORGANISATION AND NATURE EDUCATION

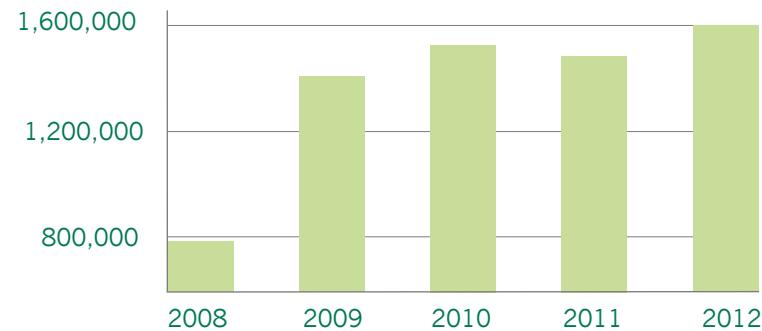


THE POSSIBILITIES OF MOVING IN NATURE

RMK has:

- 2,000 km of hiking trails
- 309 covered camp fire sites
- 50 camping areas
- 22 huts
- 18 forest houses
- 3 driving areas

Number of visits to RMK's recreational and protected areas



User feedback

The survey carried out by Turu-uuringute AS revealed that 83 % of the people in Estonia are aware of RMK's recreational areas. While among Estonians, only every tenth person had not heard of the RMK recreational areas, among non-Estonians this share was one third of all respondents.

Almost all average assessments on the quality of the services and structures at RMK's recreational areas amount to at least "good", that is 4 on a 5-point scale. The best ratings were given to the level of enjoyment of the areas and the campfire places; the assessments on waste management, firewood and outhouses remained a bit below "4".

Compared to 2010, satisfaction with the fire-making possibilities and overall safety has improved the most, along satisfaction with the parking spaces, general cleanliness and organisation of waste management. The average rating on signposts and the quality of untouched nature has remained the same or dropped slightly.

93% of the people who visited the recreational areas are very satisfied or satisfied with the amount of the offered services and structures; the level of satisfaction has increased in two years. The most room for improvement is seen in providing possibilities for practicing hobbies.



Renewals via the web and mobile phone

The website loodusegakoos.ee, which introduces the possibilities of spending time in nature, got a new look and an updated content. The webpage provides a more compact overview of all of the events and free services provided by RMK, and a simple and logical search system enables one to compile the most suitable hiking route.

The RMK mobile application was also improved by the new object search system and a route planning option, as well as spruce information that is quite valuable before Christmas. The RMK mobile application is available for iPhone, Android and Windows smartphones. The application was created in 2011 and has been downloaded 11,000 times.

EU money helps

RMK also uses support from the European Regional Development Fund in improving the possibilities for spending time in nature.

From the funds of the measure "Preservation of Natural Diversity", the most voluminous tasks were reconstruction of the stairs, boundaries, boardwalks and bridges at the Small and the Big Taevaskoda (EUR 227,000) and the visiting infrastructure of the Oru Park Landscape Protection Area (EUR 183,000).

The funds from the measure "Development of education infrastructure" were used to renovate the Sagadi Nature School (EUR 434,000) and improve the learning conditions at RMK's nature centres. The project includes 11 nature centres, out of which construction works were finished in 2012 at Aegviidu, Elistvere, Emajõe-Suursoo, Kabli, Kauksi and Oandu. The total amount to be invested into development of the infrastructure of the nature centres in 2010-2013 will be EUR 4.04 million, 90 % of which will come from the European Regional Development Fund.

HIKING TRAIL



Hiking trail crossing Estonia completed

In mid-summer, RMK opened a long-awaited hiking trail leading from one end of Estonia to the other. The opportunity to discover beautiful Estonia along the 370 kilometre-long trail – either by foot, bike or even on hiking skis – has been met with a warm welcome.

The hiking trail begins in Oandu, in Lääne-Viru County, winds through the thick forests of Kõrvemaa and one of the most majestic bog landscapes in Europe – Soomaa National Park. After that, the journey takes us to the forests of Pärnu County, twisting through coastal villages and the beautiful beaches of the Gulf of Riga. The trail passes through six counties, two national parks, nine protected areas, three recreation areas in the state forest and ends at the Estonia-Latvia border crossing at Ikla. There are 33 camping opportunities on the trail.

The opening of the hiking trail was accompanied by an extensive notification campaign and media attention, in the centre of which was a group of well-known and capable people who were the first to cover this trail from start to finish. The opening hike was attended by Aigar Kallas, Chairman of the Management

Board of RMK, Alar Sikk, mountaineer, Tõnu Jürgenson, hiking expert, Heleen Vennikas, ultra runner, Julia Ivanova, physician, and Kristjan Kaljund, film-maker and photographer. Along the different stages of the trail, the main hiking group was accompanied by other well-known figures from different fields of life.

The party travelled by foot, bike, ATV, horse, and Viking ship. People were able to view the activities of the hikers via the special webpage and the RMK blog; the hiking trail's webpage still welcomes feedback and comments from all hikers.

The construction of the 370 km hiking trail linked up already existing RMK trail segments, while also creating new ones. The trail is marked with kilometre posts and guiding signboards, the information boards next to the trail introduce forest management and its heritage, as well as culture and recreation.

Completing the hiking trail should be physically possible for everyone, and it can also be done in stages. The journey can also be taken the other way round, from Ikla to Oandu.

The first party to cover the RMK 370 kilometres long hiking trail moved by foot, bikes, horse, ATV and a Viking ship. Among the others, there was also Alar Sikk, a mountaineer, with whose help the southern part of the RMK hiking trail is already being prepared.

NATURE EDUCATION

Nature education programmes and participants

	2008	2009	2010	2011	2012
Nature programmes organised	1,276	1,868	1,926	2,449	2,993
Participants in programmes	26,196	39,395	42,231	50,776	59,931

The annual circle of forest in focus

During the year, 2993 educational programmes were carried out at RMK's nature centres and the Sagadi Nature School, which is 500 more than in the previous year. They were attended by almost 60,000 people. A large part of the nature education was provided via free campaign programmes that RMK organises for schools and kindergartens during spring, autumn and winter. While in the colder months, the attention was focused mainly on the introduction of winter nature, the spring programme offered the possibility of practical participation in forest works, and in the autumn, berries and mushrooms were in focus. Finding a suitable programme was made easier by the renewed search and ordering system of the webpage loodusegakoos.ee.

As a pilot, a follow-up programme for older students was initiated, introducing forest works and the nature of forest jobs. From the spring of 2012 to the winter of 2013, about 700 secondary school students from 17 schools all across Estonia will follow through the annual circle of forest works.

RMK's virtual forest quiz took place for the eleventh time; for the first time, the questions could also be answered in Russian. This opportunity was used by almost a thousand students. In total, 8762 students from 225 schools took part in the quiz.

SAGADI FOREST CENTRE

Visitors of Sagadi Forest Centre

	2008	2009	2010	2011	2012
Visitors at Forest Museum	25,000	21,497	23,600	32,216	28,606
Accommodation clients	8,147	6,187	7,457	9,890	8,641

An even richer core beneath a beautiful bark

The thoroughly renovated nature school at the Sagadi Forest Centre, which was re-opened in October, provides a wonderful opportunity to promote exploratory studies and including the higher stages of study.

The classroom of the nature school can now hold up to 40 people, and the rooms surrounding it are suitable for both group work and, for example, nature art courses. A terrace was built at the rear of the building, which also functions as an open air classroom on sunny days. The laboratory space is supplemented by Vernier data loggers, which enables students to have a look at the world that we live in through the eyes of a scientist.

In addition to the renewal of the nature school, traditional timber days, night museums and a

mushroom exhibition were held at the Sagadi Forest Centre. There were also plenty of visitors to the tiger exhibition, sent on a tour by the Nature museum during temporary renovations.

To celebrate the 100th anniversary of Estonian film, night films were shown at Sagadi and an information board opened in the manor's park, displaying the most legendary filming locations of Estonian movies. As an interesting fact, it was revealed that, leaving out the larger cities like Tallinn, Tartu and Pärnu, Sagadi manor is the most popular filming location in its respective county and the entire Republic.

Sagadi Forest Centre, which operates in Lahemaa National Park, accommodates a forest museum, nature school, a hotel, and a restaurant.

ELISTVERE ANIMAL PARK

Lynx on the run

The most exciting news at the Elistvere Animal Park was that several lynx escaped from their habitat. During the year, ten new animals were welcomed to the park.

The lynx set themselves free in October, when a tree felled by a storm crashed through their enclosure. The animals are no threat to humans because they have become used to them in the park. Out of the three escaped animals, one entered the trapping box and was retrieved within a few days; another was brought to the animal park in the middle of November, when he was found sitting sadly next to the Luua-Palamuse Road, watching people as they passed by. The third lynx, however, is still on the run, and its fate is currently unknown. It can be guessed that the animal either grew accustomed to forest life, or its path crossed that of a hunter along the way.

The total number of visitors to the animal park during the year was almost 55,000, which is 7000 people more than last year. The animal family also grew – three wild boar piglets, one roe deer calf and two fallow deer calves were born.

In addition to the above, a fox that was abandoned by its mother, a baby ferret that was found in a roadside ditch next to its dead mother, and a pine marten brought in from Saaremaa, all found their way to Elistvere. In the rodent collection, visitors are amazed by a little-known sugar glider that was brought to the animal park by its owner who moved to Finland. The rodents are also the ones whose living conditions improved the most in the last year – their rooms were renovated and the animals received new aquariums.

Elistvere Animal Park is home to 53 four-legged animals, 6 birds, and approximately 50 rodents.

HERITAGE CULTURE

Introduction continues, interest increases

2012 was characterised by the introduction of heritage culture at RMK's recreational areas and nature centres. Heritage culture has also become a self-

evident part of the good practice of forestry, and found its place in the long-term forest management plans of RMK's forest districts.

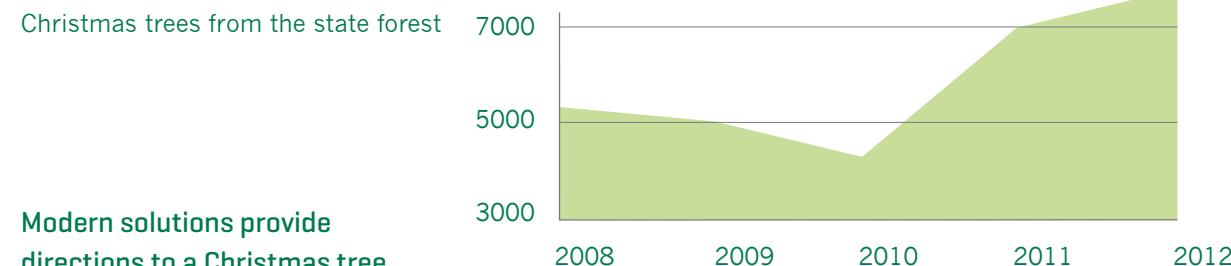
More than 35,000 heritage cultural sites have been mapped all over Estonia, and this number is by no means permanent, but constantly increasing. In 2012, 468 new objects were entered in the Land Board's database. The improved database on heritage culture now enables one to search for objects of a specific area or type, and combine them.

The Estonian-Latvian forest heritage culture conservation area was visited by 8300 people during the year, with 4000 also walking on the educational trails.

One of the largest events was Heritage Culture Day, on May 5, at Oandu Nature Centre, in which 114 participants were introduced to the gems of the area, and one of the heritage culture sites – Laevapõhja Spring – was cleaned from rubbish as a joint effort.

2013 has been declared the year of cultural heritage. The main focus in the field of heritage culture is the maintenance and display of objects. With the help of RMK employees, a special heritage culture section will appear in the pages of Eesti Loodus.

CHRISTMAS TREES



Modern solutions provide directions to a Christmas tree

Over the past holiday, more than 7600 Christmas trees were brought home from RMK forests, which is 500 more than the year before. The tradition of bringing home a tree from the forest personally is becoming increasingly popular in Estonia, and it has undoubtedly been promoted by the modern solutions created by RMK: a mobile application for finding a tree, a webpage

with 145 spruce spots located on a map, and convenient payment options. The most popular payment method, by far, was mobile payment, by which more than 5000 spruces were bought.

As an act of charity, Christmas trees from RMK's forests also reached 45 orphanages in Estonia.

THE YEAR IN NUMBERS

On-going applied research projects	4
Completed applied research projects	4
Applied research project budget 2011–2014	EUR 767,000
... of which allocated in 2012	EUR 200,000
Forestry scholarships	4
Total amount of scholarships	EUR 18,600

RESEARCH WORK

APPLIED RESEARCH PROJECTS

Kick-off of new research projects

In 2012, RMK's research council selected two new applied research projects and allocated EUR 200,000 for their execution. The RMK-funded lines of research are:

1. Development of volume equations for stand and forest assortments in Estonian growing condition

As an outcome of the project, a bark model of a standing tree is prepared, which enables the volume of the bark to be calculated when determining the diameters with the tree trunk structure model as well as when measuring with the harvester. In addition, the bark model of tree stocks is prepared, which enables the bark volume to be calculated on a measurement line and a methodology for determining the bark volume upon measuring the piled timber.

Project manager: Allan Sims from the Estonian University of Life Sciences

2. Forest protection problems associated with forest cultivation in Estonian forestry and their prevention with environmentally sustainable control methods

The purpose of the research is to investigate the efficiency of environmentally sustainable and integrated control methods in preventing damage to forests. Also, the relationships between forest pests and their parasites are examined, and the role of forest pests in spreading various pathogens is ascertained. Project manager: Ivar Sibul, from the Estonian University of Life Sciences

In addition, there are two on-going research projects that were launched in 2011, which deal with the ecological-economical analysis of shelterwood cutting and the use of spruce stumps as biomass.

RMK began targeted support for research work in 2008, when it convened a research council comprised of top researchers and initiated financing of applied research projects that support sustainable forestry. In 2011-2014 altogether EUR 767,000 is allocated for the research projects.

Summary research seminars

The first three applied research projects, funded by RMK, were finished by the end of 2011. Their outcomes were introduced in greater detail to forestry and environment experts at the research seminars, held in Tartu in 2012. Also, the practical recommendations arising from the research projects were introduced.

1. Research on the impact of forest drainage to potentially endangered biota

gave an overview based on innovative GPS-telemetry of the dietary habits of a black stork on forest water bodies, the biota of forest water bodies and the impact of drainage on the habitat and groups of species. The research gave recommendations for reconstructing forest drainage systems in such a way that the richness of forest water bodies (ditches and streams) and value as the feeding area for the black stork is improved.

2. Research on epiphytic, epixylic, and saproxylic species endangered by the use of residuals

provided the requisite background information in order to consider the use of residuals and stumps as raw material in energy production. For the first time in Estonia and in the Nordic Countries, the original data collected on the basis of a common methodology was analysed on the biota of clear cut areas and the quantity and quality of habitat suitable for these, covering different forest site types and several

groups of species related to touchwood (mosses, lichens, fungi and beetles).

3. Project on the improvement of forest stand characteristics increment models

helped RMK to ensure that the forest grows in the RMK databases as truthfully as possible during the years when inventory field works are not carried out in the forests.

These research projects and the knowledge obtained from the presentations of research works of the Doctoral School of Earth Sciences and Ecology – a joint project between universities – introduced at the research seminar, provide important information about nature protection and sustainable forest management for both, the RMK as well as the entire forestry sector. The accumulated recommendations will be worked on further to ensure that they are taken into account as much as possible in the everyday work of RMK.

At the beginning of 2012, another project came to an end, in the course of which the data on the Aegviidu testing area, collected between 2008 and 2010, was used to develop several starting points for implementing the assessment method for evaluative characteristics of forests based on LIDAR measurements and multispectral data. Development of the methodology will continue in 2013.

SCHOLARSHIPS

Five grantees

RMK grants scholarships to two doctoral students and master's students of the Estonian University of Life Sciences and one student of the Luua Forestry School, to support their forestry studies. During the year, almost EUR 18,000 was paid out as grants.

The Endel Laasi scholarship for doctoral students, in the amount of EUR 4800, was awarded to Pille Aasmets and Tauri Arumäe. The doctoral thesis of Pille Aasmets integrates forestry and social sciences and deals with public opinion regarding silviculture works. The doctoral thesis of Tauri Arumäe gives an overview of how

aerial laser scanning data can be used to create topographic models, to map out areas at risk of flooding, to create three-dimensional urban models, and to plan large-scale construction projects.

The Heino Teder scholarship, for master's students of the University of Life Sciences, in the amount of EUR 3400, was awarded to Reimo Lutter and Gunar Morozov.

The Toomas Ehrpais scholarship, in the amount of EUR 1917, was awarded to Karl-Raigo Pikhof, student of the Luua Forestry School.

The best master's thesis on chips

In addition to these five scholarships, RMK rewarded the best author of a master's thesis from the Estonian University of Life Sciences already for the 12th time. This time, the EUR 700 award went to Kaupo Valb, whose thesis discussed the calorific value of wood chips and the methodology of sampling.

In his master's thesis "Analysis of results obtained upon mixing and distributing the samples of chips used for heating", defended in the forestry field, Kaupo Valb compares the samples of wood chips in the AS Fortum Tartu Lohkva

combined heat and power producer with the indicators of the same samples at the woodfuel laboratory of the Estonian University of Life Sciences. The author recommends using a standard methodology for determining the humidity of wood chips, to ensure accuracy and reliability of the measurement data.

The thesis by Kaupo Valbi was selected due to the actuality of the topic, since timber has the highest economic potential as biofuel for producing both heat energy as well as electricity in Estonia.

RMK supports forest education, granting scholarships both in the Estonian University of Life Sciences as well as the Luua Forestry School. On the photo the forestry and environmental protection students of the University of Life Sciences get acquainted with the collection of wood waste on the RMK area in Põlva County.



FINANCIAL SUMMARY

BALANCE SHEET

(in EUR)

ASSETS	31.12.2012	31.12.2011
Current assets		
Cash	20,485,500	5,475,877
Short-term financial investments	0	37,000,000
Trade receivables	8,863,528	10,775,545
Other short-term receivables	626,361	760,164
Prepayments and deferred taxes	0	3,741
Prepayments for services	313,696	298,494
Inventories	8,777,354	7,401,789
Biological assets	26,114,084	26,114,084
Total current assets	65,180,523	87,829,694
Fixed assets		
Long-term investments	1,980,235	1,880,587
Tangible assets	389,618,113	361,630,595
Intangible fixed assets	855,559	442,281
Biological assets	741,847,889	741,847,889
Total fixed assets	1,134,301,796	1,105,801,352
TOTAL ASSETS	1,199,482,319	1,193,631,046

LIABILITIES AND NET ASSETS	31.12.2012	31.12.2011
Liabilities		
Current liabilities		
Trade creditors	5,342,607	5,061,310
Taxes payable	10,411,489	6,388,746
Employee related liabilities	2,134,342	2,091,910
Other payables	914,207	368,799
Prepayments received	53,244	126,870
Total current liabilities	18,855,889	14,037,635
Net assets		
State capital	1,087,179,793	1,069,065,038
Retained profit	74,310,917	78,535,707
Net profit for the financial year	19,135,720	31,992,666
Total net assets	1,180,626,430	1,179,593,411
TOTAL LIABILITIES AND NET ASSETS	1,199,482,319	1,193,631,046

INCOME STATEMENT

(in EUR)

	2012	2011
Sales revenue	135,750,681	137,037,811
Other operating revenue	6,412,874	2,972,493
Change in inventories of finished goods and work in progress	1,327,545	1,941,560
Preparation of fixed assets for self-consumption	21,045	0
Goods, raw materials and services	-77,129,440	-71,020,183
Other operating expenses	-11,118,487	-8,579,311
Staff costs	-20,818,957	-18,867,414
Depreciation and impairment of fixed assets	-6,196,685	-6,350,096
Other operating charges	-81,997	-503,349
Operating profit	28,166,579	36,631,511
Financial income and expenses	591,819	823,813
Profit before income tax	28,758,398	37,455,324
Income tax	-9,622,678	-5,462,658
Net profit for financial year	19,135,720	31,992,666

AUDITOR'S REPORT



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Translation from Estonian original

INDEPENDENT CERTIFIED AUDITOR'S REPORT

To the Supervisory Board of Riigimetsa Majandamise Keskus:

We have audited the financial statements of Riigimetsa Majandamise Keskus (hereafter "RMK") which comprise the balance sheet as at 31 December 2012, the statement of income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes. We conducted our audit in accordance with International Standards on Auditing (Estonia). In our independent certified auditor's report dated 1 March 2013 we expressed an opinion that the financial statements, from which the accompanying summarized statements presented on pp. 56-58 were derived, present fairly, in all material aspects, the financial positions of RMK as at 31 December 2012, and its financial performance and its cash flows for the year then ended in accordance with General Guidance of the Public Sector Accounting, Estonian Accounting Act and the guidelines issued by the Estonian Accounting Standards Board.

In our opinion, the accompanying summarized financial statements are consistent, in all material respects, with the financial statements from which they were derived.

For a better understanding of RMK's financial position and the results of its operations for the period and of the scope of our audit, the summarized financial statements should be read in conjunction with the financial statements from which the summarized financial statements were derived and our independent certified auditor's report thereon.

16 April 2013


Veiko Hintsov
Certified Auditor, No. 328
AS Deloitte Audit Eesti
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Erki Usin
Certified Auditor, No. 496

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