LUND UNIVERSITY

Vice-Chancellor

Lund University's environmental action plan 2017–2019

Approved by the vice-chancellor on 27 April 2017.

With the new environmental targets 2017–2019, the University continues to raise its level of ambition for its internal environmental work. This corresponds to Lund University's policy for sustainable development, which states that "The principle of 'practising what we preach', working preventively for continuous improvements and compliance with applicable legislation, is to characterise everyday activities at Lund University".

As a university, regional operator and public authority, Lund University must conduct its activities in accordance with regional, national and global objectives. By achieving the UN's 17 global targets for sustainable development, the countries of the world will wipe out extreme poverty, reduce inequalities and injustices on a global scale and solve the climate crisis. The Paris agreement from 2015 has determined that all countries must work together to minimise climate change and rapidly decrease our carbon dioxide emissions to close to nothing by 2050.

Earlier this year, the Swedish Government announced that it wants Sweden to be one of the world's first fossil free welfare states in the world, and this requires major investments also from its public authorities.

In order for the University to do its part to reach the international and national environmental and climate objectives, an action plan has been drawn up for four prioritised areas (significant environmental aspects) determined at the University management's review on 12 May 2016 of the environmental management system:

- Business trips by air
- Purchasing, procurement and chain of supply
- Chemicals
- Premises

Working groups consisting of staff from mainly the central University administration and faculty offices have drawn up proposals for improvements within these four areas to be implemented over the next three years of the environmental plan. Each working group has been chaired by staff from LU Estates and the Finance division. All groups have included an environmental manager and an environmental coordinator.

Three to four targets and associated measures are presented for each focus area. This environmental action plan is structured so that for each of the four focus areas, a background description is provided, followed by a description of the associated targets and measures. At the end of each section there is a summary of the targets, measures and those responsible.

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For a brief follow-up on the environmental targets for 2015–2016, see Appendix 1.

For a description of how the targets of this environmental action plan are linked to the national environmental quality objectives and interim targets, see Appendix 2.

Summary of the environmental targets

Here you will find a brief summary of Lund University's environmental targets and action plan 2017–2019 within each focus area:

1. Business trips by air

- Increase the proportion of virtual meetings through a university-wide project.
- Draw up a new meeting and travel policy.
- Investigate opportunities for carbon offsetting for business trips by air.

2. Purchasing and procurement

- Increase the proportion of framework agreements that include environmental considerations.
- Enable follow-up of environmental requirements in procurements.
- Increase the proportion of eco-labelled products in Lupin and inform staff via training and other communication.

3. Chemicals

- Reduce emissions of chemicals with an environmental or health impact.
- Minimise the risk of chemical residues in wastewater.
- Increase chemical safety through improved knowledge and better management of chemicals hazardous to health and the environment.

4. Premises

- Environmentally certify buildings in connection with constructions and renovations.
- Continue the work to optimise energy efficiency.
- Increase the proportion of reused and eco-labelled furniture.

Resources needed for the implementation of the measures and to the achievement of the targets

The targets and measures have been set with a level of ambition perceived to be realistic and feasible, but that occasionally requires extra resources.

The present environmental action plan states when the measures can be implemented using current resources. All other allocation of resources is determined separately.

In addition to the environmental benefits, some of the proposed measures are expected to lead to savings and work environment improvements in various ways.

Follow-up

A follow-up of the environmental targets and action plan will be conducted annually at a vice-chancellor's management council meeting[1].

[1] The vice-chancellor's management council is the forum for the management's review of Lund University's environmental work, in accordance with the vice-chancellor's decision on 8 October 2015 (reg. no 2015/1404).

Focus area 1: Business trips by air

Background

Reducing emissions of greenhouse gas is necessary to stop climate change and its consequences. At the University, air travel accounts for the largest net emissions of greenhouse gas, amounting to more than 6 200 tons of CO2 emissions in 2015, according to information from our travel agency. This can be compared to the 1 700 tons of CO2 emissions from district cooling, and 700 tons from district heating in the same year.

Lund University has joined Region Skåne's petition to become fossil free by 2020. Through its participation, the University has committed to strive for, by 2020:

- fossil free energy for heating and cooling of all buildings we lease
- fossil free fuel for all of our transports, travel or purchased transport services
- fossil free electricity within the organisation and purchases of eco-labelled electricity only

When it comes to heating, cooling and electricity, Lund University has nearly reached its target, but with regard to travel, further measures must be implemented to become fossil free.

Target 1.1 Increase the proportion of virtual meetings

In the 2016 public service agreement, Lund University has been given the task to apply the methods developed within the project "Virtual Meetings in Public Agencies" (www.remm.se) in its work to decrease carbon dioxide emissions from travel and transports, within the scope of its environmental management work.

To reach the target of increasing the proportion of virtual meetings, the University is to carry out a project, in accordance with the REMM method mentioned above.

This method is expected to result in decreased travel and thus reduced emissions of greenhouse gas. Several public authorities have already started working according to this method and on average reduced their travel by 10 % over a five-year period.

The University will receive support in its work from the Swedish Transport Administration's national REMM projects, partly through tested methodology and partly by allowing those concerned within the University to participate in the network and exchange experiences.

In addition to environmental benefits and savings in time and money, virtual meetings can also provide other benefits through improved communication within a geographically dispersed organisation and the possibility for an improved balance between work and spare time for individual employees. Furthermore, virtual meetings can offer people who are unable or unwilling to travel the opportunity to participate in meetings.[2]

[2] Read more about the social, financial and environmental effects of virtual meetings in "Resfria möten – en handledning (10-stegsmetoden)" by Arnfalk, Grönvall, Pilerot, Schillander, 2010 (in Swedish)

Responsibility

The university director, and others through further delegation, is responsible for implementing the measures required to achieve this target.

Resources

Decisions on resource allocation are taken separately. The person responsible is to produce supporting documentation for such a decision.

Target 1.2 Draw up a new meeting and travel policy

A new meeting and travel policy is to be drawn up to increase the proportion of virtual meetings and a reduced number of flights in favour of, primarily, train travel, especially when it comes to trips to Stockholm, which offer the greatest opportunity to reduce air travel. In 2015, the University accounted for approximately 5 000 one-way flights between Malmö and Stockholm. That same year, the estimated number of corresponding one-way trips by train was 3 200. The average trip to Stockholm in 2015 was more expensive by plane than train according to statistics from the travel agency.3

The following items should be included in a revised meeting and travel policy (some will require further investigation and support):

- Consider whether remote participation could replace the need for a trip (e.g. through teleconferencing, video conferencing or equivalent).
- Make train travel your first choice whenever possible.
- Plan meetings so that participants can get to them by train or participate remotely.
- When choosing between train and air travel, work efficiency and opportunity for recovery during a train ride is to be taken into account. For train travel, you may select 1st class to provide better opportunities for work and recovery. In order to promote train travel, you may choose an overnight train or book accommodation for an extra night away as needed. When traveling by train overnight, you may reserve a private compartment.

In addition to this, a review of travel time in relation to the working time should be performed.

Furthermore, the importance of following current agreements and guidelines when purchasing trips is to be emphasised.

The current travel policy is from 1997 and contains a general statement about environmental considerations that apply to business trips. Communication is important to encourage all those affected to conduct more virtual meetings and to reduce the number of flights. Once the new meeting and travel policy is in place, the travel agency’s booking procedures are to be adjusted accordingly as soon as possible.

The need for a new post in the form of a meeting and travel coordinator is to be investigated.

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[3] Flight: average cost SEK 737/one way (based on SAS, Norwegian and Malmö Aviation). Train: average cost SEK 542/one way (SEK 390 for 2nd class and SEK 609 for 1st class). Airport coach: approximate cost SEK 150–200 depending on the purchase method and distance.

Currently, there is no specific post for addressing the overall opportunity for virtual meetings and for supporting the organisation with regard to meeting and travel planning so that all employees book correctly, for the right price, and receive compensation in the event of a problem (equivalent to a travel manager). A meeting and travel coordinator is also needed to better follow up on the University's business trips and travel expenses, as well as its meeting and travel policy.

Responsibility

The university director, and others through further delegation, is responsible for implementing the measures required to achieve this target.

Resources

Decisions on resource allocation are taken separately. The person responsible is to produce supporting documentation for such a decision.

Target 1.3 Investigate opportunities for carbon offsetting of business trips

Even after targets 1.1 and 1.2 have been achieved, a lot of carbon emissions remain from business trips. A possible solution to achieve the regional goal of becoming fossil fuel free by 2020 is to introduce some form of carbon offsetting for emissions generated by travel by air or other means of transport.

Therefore, the opportunity for creating an internal carbon offsetting system for travel is to be investigated. Such a system could involve a penalty fee system connected to an internal carbon offsetting fund or equivalent. Other universities in Sweden and public authorities in Skåne have adopted this method, adding a surcharge of approximately SEK 100 or more per flight. In order to be referred to as carbon offsetting, the measures implemented with the fund should provide a measurable reduction in emissions equivalent to the emissions from travel.

Responsibility

LU Estates is responsible for implementing the measures required to achieve this target.

Resources

The measures require no additional resources.

Summary of targets and measures:

Environmental targets for focus area 'Business trips by air'	**Measures**	**Responsibility**	**Implemented**
Target 1.1 Increase the proportion of virtual meetings	Conduct a project in accordance with REMM's 10-step method for more virtual meetings	University director	2019
Target 1.2 Draw up a new meeting and travel policy	Draw up a new meeting and travel policy Based on the new policy, update and disseminate staff information about the environmental considerations that apply to travel	University director	2018
	Investigate the need for a new post in the form of a meeting and travel coordinator	University director	2019
Target 1.3 Investigate opportunities for carbon offsetting of business trips	Investigate the possibility of creating an internal carbon offsetting system for air travel	LU Estates	2018

Focus area 2: Purchasing, procurement and chain of supply

Background

The Purchasing and Procurement office conducts procurements on behalf of clients within Lund University. The office is part of the Finance division. The framework agreements signed in 2012–2015 corresponded to a total of approximately SEK 2.3 million. The University also procured a number of specific objects to the organisation.

Target 2.1 Increase the proportion of framework agreements that include environmental considerations

The Public Procurement Act states that public authorities should take environmental requirements into account in connection with public procurements. An investigation performed by the Purchasing and Procurement office showed that environmental requirements were included in a large number of procurements. To further raise the level of ambition, environmental requirements will be incorporated into three additional procurements: work clothes, service vehicles and security services. The agreement on work clothes was selected with a particular focus on the work environment. Agreements in the areas selected for the investigation will expire during the period of the present environmental action plan. Other areas may be covered in the next environmental action plan. (See also target 4.3 concerning increased environmental requirements and reduced purchasing of furniture.)

Responsibility

The Finance Division, supported by LU Estates, is responsible for implementing the measures required to achieve this target.

Resources

The measures require no additional resources.

Target 2.2 Improve the follow-up of environmental requirements in procurements

By including environmental requirements in procurements, the University can contribute to significantly reducing the environmental impact.

The University follows up on its procurements at least once a year; but the systems and procedures currently in place do not enable a structured follow-up of environmental requirements in procurements. The reason for this is that it is a complex area and that there are many suppliers (there are currently about 540 framework agreements and more than 31 000 suppliers in our database).

The purchasing behaviour within the University results in insufficient statistics for follow-up:

- The opportunity for using the existing ordering system (Lupin), which enables follow-up of electronic orders with a matching invoice at the procured price, is not fully utilised.
- A reason for this is that many people at the University order so infrequently that they are not comfortable with or know how to use the system, or even how to find it.

- Deficiencies in delegating invoices in case of absence, as well as deficiencies in handling approvals of electronic orders in the ordering system. If a placed order is not approved quickly by the authoriser the person who placed the order usually calls the supplier directly, which can lead to incorrect pricing and added shipping and billing costs that the University is not to pay in accordance with the procurement agreement. Orders placed over the phone are not matched against the procured price.

Overall, this also leads to the University failing to obtain a good deal, also from an environmental perspective.

Conditions for better follow-up are to be created. This will require changes in behaviour and system support, as well as an initial pilot study. The pilot study is to evaluate the need for a new system tool to be able to produce purchasing statistics on the proportion of eco-labelled products.

Responsibility

The Finance Division, supported by LU Estates, is responsible for implementing the measures required to achieve this target.

Resources

Decisions on resource allocation are taken separately.

Target 2.3 Increase the proportion of eco-labelled products in Lupin

The green leaf in Lupin symbolises some form of eco-labelling. Whenever a framework agreement is renewed, a review is conducted to try to increase the proportion of green leaf products. The green leaf highlights good environmental choices when placing an order, but it is impossible to tell whether it is used in practice as such purchasing statistics cannot be obtained using the current system. See target 2.2 which proposes a pilot study on follow-up.

Although there are already many green leaf products in Lupin we must increase our use of these products. The person placing the order is responsible for choosing eco-labelled products. Efforts will also be made in terms of communicating the advantages of making more eco-friendly purchases.

Responsibility

The Finance Division, supported by LU Estates, is responsible for implementing the measures required to achieve this target.

Resources

The measures do not require additional resources.

Summary of targets and measures:

Environmental targets for focus area 'Purchasing, procurement and chain of supply'	**Measures**	**Responsibility**	**Implemented**
Target 2.1 Increase the proportion of framework agreements that include environmental considerations	Identify further areas, especially from a work environment perspective: Work clothes: produced and washed without using harmful chemicals. Applies to both purchasing and renting of work clothes Service vehicles: all new vehicles purchased must be eco-labelled Security services: the security companies' service vehicles must be eco-labelled	Finance Division	2019*
Target 2.2 Improve follow-up of environmental requirements in procurements	Conduct pilot study: develop procedure for following up on environmental requirements in procurements On the basis of the pilot study, draw up a project plan for improving the follow-up of the University's procurements.	Finance Division	2018
Target 2.3 Increase the proportion of eco-labelled products in Lupin	Actively try to influence suppliers to include eco-labelling in their catalogues	Finance Division	2019**
	Increase awareness of eco-labelled products available in Lupin, in newsletters, through training or other communication	Finance Division	

*) Whenever a new agreement is signed. Could take more than 3 years.

**) Continuously.

Focus area 3: Chemicals

Background

A large number of different types of chemicals are used at Lund University and there are about 20 000 different chemical products registered in the chemical database KLARA. The use of chemicals at Lund University can be divided into 1) chemicals used within laboratory activities, and 2) chemicals used in other parts of the University.

The major laboratory organisations include Kemicentrum, BMC, Department of Physics and CRC. Certain, albeit limited, use of chemicals takes place within non-laboratory organisations, especially in the context of cleaning. The organisations within Lund University are constantly working to prevent and reduce the potential risks involved in managing chemicals that are harmful to people's health and the environment. The work includes risk assessments, replacing chemicals with less harmful alternatives and reducing the volume wherever possible in relation to training and research needs, securing the storage of chemicals, reducing the risks involved in laboratory work, conducting chemical training for staff and students, and ensuring a safe final disposal of the chemicals as hazardous waste.

Target 3.1 Reduce emissions of chemicals into the air

This target is about identifying potential health and environmental risks associated with air pollution and, when necessary, find a method to measure such pollution. Draw up guidelines to ensure that municipal and other regulations are followed and conduct control measurement as needed. When deemed necessary, take preventive measures and install purification equipment. Any installed purification equipment is to be paid for by the organisation concerned.

The justification for this target is that today there is uncertainty concerning diffuse emissions from organisations conducting laboratory activities. The emissions are mainly from chemicals handled in fume cupboards etc., and chemicals with volatile properties such as organic solvents. The emissions into the air are currently not being measured.

Responsibility

LU Estates is responsible for implementing the measures for steps 1 and 2 in collaboration with an external consultant, the building management, organisation concerned and the landlord.

The head of department concerned is responsible for the implementation of step 3.

Resources

Decisions on resource allocation are taken separately.

Target 3.2 Chemicals management that is safe to people's health and the environment

The background of this target is that today there are no complete university-wide rules concerning the management of chemicals. Such rules are needed to clarify and interpret legal requirements and communicate internal University rules. The current instructions and procedures at Kemicentrum, BMC, Department of Physics,

Max IV, etc. form a basis for the forthcoming chemicals handbook together with current legislation and best practice.

The new chemicals handbook is to include rules for laboratory work, workshops, housekeeping and cleaning, printing and similar activities. The handbook is to provide information about chemicals, including gas, from a life-cycle perspective as well as from a health and environmental perspective, covering purchasing/procurement, storing/transport, authorisation management, choice of method, risk assessment, exchange/substitution of chemicals, elimination and sanitation (in line with Lund University's waste management handbook).

Another measure to promote the safe management of chemicals is to require all new constructions/renovations of organisations that handle chemicals to have a separate goods entrance. The aim is to minimise the risks involved in using a joint entrance.

Responsibility

LU Estates is responsible for implementing the measures for target 3.2, in collaboration with a chemicals group with representatives from faculties with laboratory activities.

Resources

The measures require no additional resources.

Target 3.3 Minimise the risk of pollution in wastewater

Through a control programme, the University is systematically to follow up and attend to any substances hazardous to health and the environment in wastewater generated from our laboratory activities. The control programme is to be seen as a complement to the rules that apply to laboratory activities to prevent risks of releasing health and environmentally hazardous substances into the wastewater. Such risks must be identified prior to the development of the programme. Investigations and measures should be based on the identified problem areas that emerge through e.g. follow-up of local, municipal and regional requirements and environmental quality objectives/equivalent. It should also be highlighted how the handling of large volumes of aqueous solutions with low concentrations of substances hazardous to health and the environment is to take place in a way that it safe to people's health and the environment, as well as cost-effective.

The justification for target 3.3 is that within Lund University the potential presence of substances hazardous to health and the environment in wastewater generated from our activities is currently not being measured systematically, apart from the measurements of mercury at Kemicentrum and of various substances at BMC. In accordance with the ordinance on operator self-monitoring, Lund University is to have procedures in place that control the aspects of its activities with a potential environmental impact.

Responsibility

LU Estates is responsible for implementing the measures required to achieve the target, in collaboration with the organisation concerned and the landlord.

Resources

Decisions on resource allocation are taken separately.

Target 3.4 Increase knowledge and awareness of the health and environmental risks from chemicals and reduce such risks

In order to increase knowledge and awareness about the health and environmental risks of chemicals, various forms of training and professional development measures adapted to the target group are to be performed, including the production of a film on laboratory safety. For the same purpose, the overall proportion of reviewed and approved chemical products included in the chemical registration system is to increase from the current level of 75% to 90%. Review and approval means applying the method used in the auditing tool which belongs to KLARA.

The justification for this target is that everyone who comes in contact with chemicals is to feel safe about the way they are managed, to prevent and reduce risks to people's health and the environment. Some of the training should be mandatory or considered an additional qualification. Reaching different groups may require special efforts.

Responsibility

LU Estates is responsible for implementing the measures required to achieve this target.

Resources

For measures 1 and 2, decisions on resource allocation are taken separately.

Measures 3, 4 and 5 require no additional resources.

Summary of targets and measures:

Environmental targets for focus area 'Chemicals'	Measures	Responsibility	Implemented
Target 3.1 Reduce emissions of chemicals into the air	Step 1. Identify health and environmental risks from emissions of pollutants into the air. If necessary, identify methods for measuring air pollution.	LU Estates	2018
	Step 2. Draw up guidelines to ensure that municipal and other regulations are followed and conduct control measurement as needed.	LU Estates	2018
	Step 3. Consider the need for preventive measures and, when applicable, installation of sufficient purification equipment. Weigh the costs in relation to health and environmental benefits.	Head of department	2018
Target 3.2 Chemicals management that is safe to people's health and the environment	Produce a University-wide chemicals handbook, taking into account the synergies between environmental and work environmental aspects.	LU Estates	2018
	Require all new constructions/renovations of organisations that handle chemicals to have a separate goods entrance.	LU Estates	2017
Target 3.3 Minimise the risk of pollution in wastewater	Step 1. Identify health and environmental risks of releasing hazardous substances into the wastewater.	LU Estates	2017
	Step 2. Find a method for measuring pollution in wastewater.	LU Estates	2017
	Step 3. Develop a control programme for measuring pollution in wastewater.	LU Estates	2017
Target 3.4 Increase knowledge and awareness of the health and environmental risks from chemicals and reduce such risks	Develop internal expertise and customised training in health and environmental risks from chemicals, risk assessment, and KLARA.	LU Estates	2019
	Produce a short film on laboratory safety with examples of good management of chemicals/hazardous waste that is safe to people's health and the environment.	LU Estates	2017
	Include health and environmental perspectives when introducing staff and students to laboratory activities	LU Estates	2018
	Make sure that the proportion of reviewed and approved chemicals in KLARA increases to 90% by 1) increasing the review of chemicals and 2) securing administrative processes in KLARA.	LU Estates	2018
	Participate in national chemicals groups through a Lund University representative.	LU Estates	2017

Focus area 4: Premises

Background

Buildings have a major environmental impact during the construction, use and demolition phase with regard to, for instance, energy consumption, choice of materials and products, raw materials consumption and waste. The University already places demands on the design of new constructions and during renovations in order to reduce the negative environmental impact of the building. By demanding that the buildings the University leases are environmentally certified, the environmental requirements would increase and expand, and important aspects with regard to energy efficiency, indoor environment and the choice of materials would be ensured.

Lund University uses a lot of energy and several activities are particularly energy intensive. Although the energy mainly comes from renewable energy sources, there is still potential to improve energy efficiency.

Increased reuse of furniture is a natural continuation of previous environmental targets to improve recycling. By increasingly considering furniture from a recycling perspective it may be possible to prevent waste, conserve natural resources and reduce the need to buy new furniture. When new furniture need to be acquired, they are to be eco-labelled as far as possible.

Target 4.1 More environmentally certified buildings

This target means that for any new constructions or renovations, the University is to demand that the building is environmentally certified, in order to ensure important qualities when it comes to energy efficiency, indoor environmental quality and the choice of materials.

The most widely used system in Sweden for buildings is Miljöbyggnad (Green Building), which also works as a quality management system. The system has three levels – Bronze, Silver and Gold – and target 4.1 is about the University striving for the highest level, Gold, for all new constructions. For renovations, Silver is required, subject to technical and cultural heritage considerations. However, Gold is to be the ambition whenever possible. Bronze corresponds approximately to Swedish building regulations, while Gold involves considerably higher demands. Through internal regulations (Krav & Råd), the University already demands that all new constructions and major renovations of buildings are to meet the criteria equivalent to Silver.

The Miljöbyggnad system has several advantages over other systems. It is the system that is most adapted to Swedish building standards and refers only to the building itself. Other certification systems (such as LEEAD and BREEAM) include several additional aspects that are difficult for the University to influence such as public transportation adjacent to the building. Miljöbyggnad is linked to the building material assessment and provides good control over the materials. For more information on Miljöbyggnad, please visit: https://www.sgbc.se/var-verksamhet/miljoebyggnad.Other certification systems equivalent to the requirements of the Miljöbyggnad levels of Gold and Silver are also acceptable.

Responsibility

LU Estates is responsible for implementing the measures required to achieve this target, in collaboration with the University’s current and future landlords.

Resources

The measures do not require additional resources.

Target 4.2 Continue the work to optimise energy efficiency

A new energy investigation must be conducted to make the University's energy consumption more efficient. The investigation is to identify additional areas where savings can be made and find ways to create incentives to make sure that the measures are actually implemented. The energy investigation is to provide a basis for carefully considered measures that will have the greatest impact, and draw up proposals on how each organisation can receive clear feedback on how much they could save in terms of energy and money.

A pilot study is to be conducted, resulting in a project plan for the implementation of the energy investigation.

In order to conduct this energy investigation, coordinate and encourage efforts, provide support in the form of knowledge and time on all levels, an additional resource with expertise in strategic energy work will be required.

The continued work on energy efficiency will also require resources within each faculty/building. The extent of the resources depends on which measures each faculty decides to implement based on the results of the energy investigation.

Responsibility

LU Estates is responsible for implementing the measures required to achieve this target.

Resources

Decisions on resource allocation are taken separately.

Target 4.3 Increase the proportion of reused and eco-labelled furniture

Fully functioning furniture is currently thrown away during relocations, when workplaces are upgraded for ergonomic reasons, or because the furniture is worn.

With relatively simple means, the University can reduce the need to buy new furniture. This target can be achieved by facilitating refurbishment of existing furniture and by becoming better at matching the needs and demands through an internal online buy-and-sell service.

To facilitate the refurbishment of existing furniture, the University is to procure such services.

Currently, there is already the opportunity of utilising the University's agreement with removal firms to take care of serviceable furniture etc.

To increase reuse, the University could create an internal buy-and-sell service. This service should be designed as a simple and user-friendly app, where the seller can take a photo and instantly publish information about the object. The idea is to keep the object in its original location, or to move it to a temporary location, until it is sold/donated or until the selling period has expired and the seller disposes of the object in some other way. This way the process does not require any special locations or resources to manage the reception, storing and selling of objects.

However, the buy-and-sell service will require certain resources for the development and subsequent administration and management of the system.

An investigation must first be conducted to describe the need for and impact of an internal buy-and-sell service. An app or equivalent is also to be developed, if necessary.

To increase the proportion of eco-labelled furniture, the University is to facilitate choosing such furniture when making new purchases by drawing up and communicating environmental requirements for furniture.

Responsibility

LU Estates is responsible for implementing the measures required to achieve this target.

Resources

The measures to procure refurbishment services, and to draw up and communicate environmental requirements for furniture do not require additional resources.

Decisions on resource allocation with regard to the development of an internal buy-and-sell service are taken separately.

Summary of targets and measures:

Environmental targets for focus area 'Premises'	**Measures**	**Responsibility**	**Implemented**
Target 4.1 More environmentally certified buildings	Establish the following requirements for landlords: New constructions are to strive for Gold, in accordance with environmental certification system Miljöbyggnad; Silver is a requirement. For renovations, Silver is required, subject to technical and cultural heritage considerations. Gold is to be the ambition whenever possible. (Equivalent certifications are acceptable.)	LU Estates	2017
Target 4.2 Continue the work to optimise energy efficiency	Conduct a pilot study on how to make the University's energy consumption more efficient. Based on the pilot study, draw up a project plan to support a decision on the implementation of an energy investigation that includes mapping the energy consumption and proposing energy efficiency targets.	LU Estates	2018
Target 4.3 Increase the proportion of reused and eco-labelled furniture	Procure services for the refurbishment of existing furniture.	LU Estates	2018
	Draw up and communicate environmental requirements that can be used when ordering and purchasing furniture.	LU Estates	2018
	Investigate the need for and effects of an internal buy-and-sell service. If needed, develop a buy-and-sell app.	LU Estates	2018

Appendix 1.
Follow-up of the environmental targets and action plan 2015–2016

As part of the University's internal environmental work, five environmental targets to work on in 2015–2016 were set in 2015. Four of the five targets were implemented within the planned time frame. The remaining target is to introduce uniform recycling decals, which is estimated to be completed in 2017.

See below for a brief summary of the follow-up of the previous environmental action plan:

Environmental target	Result	
1. Implement an environmental review to identify significant environmental aspects of the organisation.	The review was conducted during the period of the plan. In the continued environmental work in 2017–2019, management has given priority to four areas: Business trips by air; premises; purchasing, procurement and chain of supply; and chemicals.	
2. Introduce procedures for management review and appoint a management representative as an important component of the University environmental management system.	A procedure for management review was introduced in 2015 and involves the environmental manager at LU reporting on the situation to the vice-chancellor's management council twice a year. A management representative of the University's environmental work has been appointed (the university director).	
3. Set up a sustainability council at Lund University for support and advice to the environmental manager.	In 2015, the steering committee for the University's Sustainability Forum became the Lund University Sustainability Council.	
4. Increase collaboration with property owners to achieve energy efficiency/savings through a new agreement template.	A new type of agreement which creates incentives for both Lund University as a tenant and property owners to make energy savings by investing in the property was drawn up in 2015 in collaboration with Akademiska hus. A pilot project was implemented at BMC in Lund in 2016.	
5. Simplify waste sorting and make it easier to get it right by including decals for recycling in the University's recycling programme.	The work to develop uniform decals for Lund University is underway and estimated to be completed in 2017. A waste management handbook with advice and guidelines on sorting and hazardous waste has also been produced in 2016. Work Environment, Sustainability and Safety at LU Estates is responsible for finalising this target.	

Appendix 2. Lund University's environmental targets contribute to the achievement of the regional and national environmental objectives

Lund University's environmental targets are expected to contribute directly or indirectly to achieving several of the 16 national environmental objectives as well as the 17 global sustainability objectives. The table shows which of the national and global objectives that are most clearly linked to the University's environmental targets.

Lund University's environmental targets 2017–2019	National (and regional) environmental objectives to which the University's targets contribute	Global sustainability objectives to which the University's targets contribute
Target 1.1 Increase the proportion of virtual meetings Target 1.2 Draw up a new meeting and travel policy Target 1.3 Explore opportunities for carbon offsetting of business trips	Objective 1. Reduced climate impact Objective 2. Fresh air Objective 3. Natural acidification only	Objective 13. Fight climate change
Target 2.1 Increase the proportion of framework agreements that include environmental considerations Target 2.2 Improve the follow-up of environmental requirements in procurements Target 2.3 Increase the proportion of eco-labelled products in Lupin	Objective 1. Reduced climate impact Objective 2. Fresh air Objective 3. Natural acidification only Objective 4. A non-toxic environment Objective 12. Sustainable forests Objective 13. A rich agricultural landscape Objective 15. A good built environment	Objective 12. Sustainable consumption and production
Target 3.1 Reduce emissions of chemicals into the air Target 3.2 Chemicals management that is safe to people's health and the environment Target 3.3 Minimise the risk of pollution in wastewater Target 3.4 Increase knowledge and awareness of the health and environmental risks from chemicals and reduce such risks	Objective 2. Fresh air Objective 4. A non-toxic environment Objective 8. Flourishing lakes and streams Objective 13. A rich agricultural landscape	Objective 12. Sustainable consumption and production
Target 4.1 More environmentally certified buildings Target 4.2 Continue the work to optimise energy efficiency Target 4.3 Increase the proportion of reused and eco-labelled furniture	Objective 15. A good built environment	Objective 7. Sustainable energy for all Objective 12. Sustainable consumption and production

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