

KI's management system for the environment and sustainable development

Karolinska Institutet's action plan for the environment and sustainable development 2016-2018

Ref. no. 1-85/2016

Date 2016-12-19



**Karolinska
Institutet**



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Ref.no.: 1-85/2016	Ref. no previous version: 1-85/2015	Date of decision: 2016-12-20	Period of validity: 2018-12-31
Decided by: Vice-Chancellor		Document category: Action Plan	
Handled by office/unit: Facilities Office/ Security and Environment Unit		Prepared together with: KI's environmental council, KI's boards and involved units	
Revised concerning: New steering document			

The purpose of the action plan

A requirement of Karolinska Institutet's (KI's) management system for the environment and sustainable development is that goals be established and action plans devised in order to bring about continual improvement of our environmental performance and to contribute to a sustainable development.

Karolinska Institutet's action plan for the environment and sustainable development 2016-2018 is intended to help KI attain its core values as laid out in Strategy 2018:

The activities of Karolinska Institutet fall within an area where fundamental values are of a particular importance. The public is entitled to place extensive demands on our approach and activities. KI must safeguard the freedom of research, and our activities are to be characterised by

- good leadership, employeeship, inclusion, openness, equality and diversity, as well as care for the internal and external environments
- a strong social commitment and contributions to sustainable development within and outside Sweden's borders through our education and research.

The ordinance on environmental management in government authorities (SFS 2009:907) requires KI to systemise its environmental management.

Consequently, KI is building up a management system for the environment and sustainable development in accordance with the international environmental management systems standard ISO 14001:2015. Producing environmental goals and action plans for their attainment is an important part of environmental management. These goals are to be made as quantifiable as possible.

This action plan is based on the Higher Education Act (1992:1434), the Swedish Environmental Quality Objectives and the UN's Global Sustainable Development Goals (Agenda 2030).

Aim

The aim of this action plan is to help KI achieve the overall objectives of its environment and sustainable development guidelines (i.e. KI's environmental policy). Accordingly KI shall:

- through research and education contribute with knowledge on health and sustainable development,
- use energy efficiently and in the future become climate-neutral,
- reduce the climate impact of our business trips,
- set environmental and ethical requirements for our procurements and purchasing,
- minimize the health and environmental risks in the laboratory activities,
- sort waste at source and reduce the amount of waste,
- view acts, ordinances and other requirements as the minimum level needed for our activities, and
- carry out environmental and sustainability work that is continually being improved.

The action plan contains overall environmental goals and the goals and activities that KI's boards and the University Administration have planned as part of their specific environmental and sustainability responsibilities as set forth in KI's management system for the environment and sustainable development: "Organisation and responsibilities within KI's environmental and sustainability work", Dnr 1-55/2013.

KI's departments (or the equivalent) shall contribute to the fulfilment of KI's Strategy 2018, KI's guidelines for the environment and sustainable development and the objectives of this action plan. As instructed, they shall set out in their operational plans and annual activity plans the relevant internal measures/activities that they can do to achieve this.

Budget-affecting activities/measures shall be addressed in the activity plans and be included in the budget process. Environmental goals and activities might need to be updated when necessary.

Monitoring

This action plan shall be monitored annually or whenever necessary. Whoever is responsible for a goal/activity is required to follow up and report results to the Security and Environment Unit at the start of the year. At the concluding followup, goal fulfilment for the entire period will be evaluated.

Every year, Karolinska Institutet accounts for its environment and sustainability activities in its annual report and in reports to the Swedish Environmental Protection Agency, the Ministry of Education and Research and the Swedish Transport Agency. Its environmental management work is also reported during the management's annual review of the university's management system for the environment and sustainable development, at which suggestions for improvement are also addressed.

The monitoring of KI's environment and sustainable development activities will be included in the university's overall quality system.

1. Environmental management system

Overall objective: To have an environmental management system that guarantees a systematic approach to environment and sustainability activities and that fulfils all formal requirements¹.

Goal: To ensure that KI's management system for the environment and sustainable development meets the requirements of the updated international environmental standard ISO 14001:2015.

Approach: Continue to introduce and implement a management system for the environment and sustainable development that meets the requirements of the updated international environmental standard ISO 14001:2015.

Responsible body: The university management.

Timetable: 2016-2018.

Resources: As allocated for in the Security and Environment Unit's budget. In association with other parts of the University Administration.

Departments (or the equivalent)

Departments (or the equivalent) set aside the necessary time and resources, in relation to the nature of their activities, for the continuing implementation of KI's management system for the environment and sustainable development, for systematic environment work, and for knowledge dissemination.

Goal/measure: To conduct an environmental review of KI's activities.

Approach: Conduct an environmental review of KI's activities with the support of a consultant. The review will be kept up to date by being amended when any major changes are made, or at least every five years. The environmental review is to specify how KI's activities impact the environment, both directly and indirectly, and assess which environmental aspects are the most significant. The review is also to contain information on the environmental requirements, legal and otherwise, that affect the university's activities.

Responsible body: The Security and Environment Unit.

Timetable: 2017.

Resources: As allocated for in the Security and Environment Unit's budget with the help of consultancy support.

2. Research and education

Karolinska Institutet's guidelines for the environment and sustainable development require it to contribute knowledge on health and sustainable development through research and education. Strategy 2018 states that our activities are to be characterised by a strong social commitment and contributions to sustainable development within and outside Sweden's borders through education and research.

¹ See Ordinance 2009:907 on environmental management in government authorities and ISO 14001:2015.

The boards' role in KI's environment and sustainability activities

The goals and activities of the boards are laid out in their respective operational and activity plans by decision of the deans.

Board of research

Task: *To emphasize and strengthen the health and sustainable development aspects of research at KI.*

Overall objective: To strengthen the health and sustainable development aspects of research at Karolinska Institutet.

Goals:

- To more effectively promote, integrate and make visible KI's sustainability activities in its research wherever possible.
- To enhance research competence in the field.
- To have a clearer environmental and sustainable development profile at KI able to stimulate the recruitment of expertise and attract new financiers.

Approach: Under the KI vice-chancellor is an environment committee that includes one representative (former co-opted member) from the board and that works with general plans and activities etc. KI's management system for the environment and sustainable development describes the organisation and responsibilities at different levels for this work. The board's main responsibility in the area is to pursue activities that emphasize and strengthen KI's research in health and sustainable development.

1. Research of particular relevance to the environment and/or sustainability at KI was identified and mapped in 2015. The next step is to post the results onto the KI website and the researchers' "own" web pages. A communication plan will also be devised in association with the Communications and Public Relations Office.
2. An experience inventory and exchange programme is also planned with the country's other medical faculties and other universities.
3. Seminar/inspiration day: joint activity with the other two boards.
4. Based on the above objective/goals and activities: review the possibility of packaging together the research conducted at KI with specific relevance to the environment and/or sustainability to make it visible to external financiers in association with the Grants Office and Development Office. To improve the current website (Environment and sustainable development), with links to research groups.

Responsible body: The Board of Research.

Timetable: 2016-2018.

Resources: A sustainable development coordinator has been appointed. Otherwise as allocated for in the Board of Research's budget.

Departments (or the equivalent)

The appropriate goals and measures are set out in the operational and activity plans.

Board of Doctoral Education

Task: *To emphasize and strengthen the health and sustainable development aspects of doctoral education at KI.*

Overall objective: To strengthen the health and sustainable development aspects of doctoral education at Karolinska Institutet in line with Strategy 2018.

Goal: To ensure that doctoral education at KI is characterised by an awareness of sustainable development and its significance in relation to health.

Approach: Integrate these aspects into the board's activities. A coordinator has been appointed to propose and subsequently implement relevant measures.

1. Survey how sustainable development has been integrated most successfully into doctoral education programmes at other national and international medical universities/faculties.
2. Use the results of the above to enhance the sustainable development aspects that already exist in doctoral programmes, the research group leader course and in the online section of the new doctoral student introduction package.
3. Seminar/inspiration day: joint activity with the other two boards.
4. Ensure that programme coordinators are more aware of and knowledgeable about sustainable development and its implications for doctoral education at KI.
5. Disseminate information online and in newsletters on current doctoral education activities at KI relevant to sustainable development and thus strengthen collaboration and shared learning on the subject and its significance in relation to health and healthcare.

Responsible body: The Board of Doctoral Education.

Timetable: 2016-2018.

Resources: The board has appointed a coordinator to propose, coordinate and implement relevant activities. Otherwise as allocated for in the Board of Doctoral Education's budget.

Departments (or the equivalent)

Contribute knowledge on health and sustainable development in doctoral education.

Board of Higher Education

Education is one of the most important environmental aspects of KI and a field that should be given top priority in KI's continuing efforts to improve its environmental performance.

Task: *To emphasize and strengthen the health and sustainable development aspects of higher education at KI.*

Overall objective: To strengthen the health and sustainable development aspects of higher education at Karolinska Institutet in line with Strategy 2018.

Goal: To ensure that higher (first- and second-cycle) education is characterised by a distinct awareness of sustainable development and its significance in relation to health and the organisation of healthcare.

Approach: The board's main responsibility in the area is to pursue activities that emphasize and strengthen KI's education in health and sustainable development.

1. Seminar/inspiration day: joint activity with the other two boards.
2. Survey the range of courses within each first- and second-cycle programme to highlight positive examples and identify opportunities to strengthen their sustainable development aspects.
3. More accurately define what sustainable development means to KI's core operations.
4. Inform programme committees and departments about sustainable development so that they have a better understanding of the subject and its implications.
5. Disseminate information online, in newsletters and at teachers' days on current higher education activities at KI relevant to sustainable development, and thus strengthen collaboration and shared learning on the subject and its significance in relation to health and healthcare.

Responsible body: The Board of Higher Education.

Timetable: 2016-2018.

Resources: The board has appointed a coordinator to propose, coordinate and implement relevant activities. Otherwise as allocated for in the Board of Higher Education's budget.

Departments (or the equivalent)

The appropriate goals and measures are set out in the operational/activity plans.

Follow up: The environment and sustainable development will be included in forthcoming quality evaluations of KI's research, doctoral education and higher education activities.

IT Office

3. Green IT

Task: *To actively promote greener, more flexible IT services.*

Goal/measure: To produce and implement Green IT guidelines (a Green IT policy).

Approach: In 2016, the IT Office will draw up Green IT guidelines, and pending decision by the vice-chancellor in Q1 2017 will implement them in 2017-2018.

Responsible body: The IT Office.

Timetable: 2016-2018.

Resources: Appoint a representative with the time to work with Green IT issues. Otherwise as allocated for in the IT Office's budget, in association with the Security and Environment Unit and the Finance Office.

Goal/measure: To increase the reuse of IT equipment.

Approach: Examine the possibility of and take steps to increase the reuse of IT equipment such as mobile phones, tablets and computers, and of procuring the services of a company contracted to collect, wipe and recycle or reuse IT equipment (e.g. through the telephony contract to be tendered in 2018); within this framework, ensure that the material is recycled/reused in a socially and environmentally acceptable way.

Responsible body: The IT Office.

Timetable: 2016-2018.

Resources: As allocated for in the IT Office's budget, in association with the Security and Environment Unit and the Finance Office.

Goal/measure: To reduce the environmental impact of IT equipment purchases and related waste by increasing their useful life.

Approach: Examine the possibility of increasing the useful life of IT equipment such as mobile phones, tablets and computers (e.g. by demanding/selecting extended suppliers' guarantees) and, if deemed appropriate, to implement this.

Responsible body: The IT Office.

Timetable: 2017-2018.

Resources: As allocated for in the IT Office's budget, in association with the Security and Environment Unit and the Finance Office.

Task: *To provide IT-based communication services and support to facilitate virtual meetings.*

Goal/measure: To reduce the need of travel by encouraging the use of digital conference solutions such as Adobe Connect for meetings at KI.

Approach: Provide updated information and, when necessary, instructions on the use of available solutions (see under Duty travel and virtual meetings).

Responsible body: The IT Office.

Timetable: 2016-2018.

Resources: As allocated for in the IT Office's budget, in association with Travel Manager and the Premises Service Unit.

Departments (or the equivalent)

Departments (or the equivalent) contribute to KI's work with Green IT where relevant.

Finance Office

4. Procurements and purchases

Karolinska Institutet's guidelines for the environment and sustainable development require the university to impose environmental and ethical requirements on procurements and purchases.

Task:

- *To draft framework agreements in keeping with prevailing laws, ordinances, instructions etc. on green and ethical tendering.*
- *To insist that prospective suppliers give their more environmentally friendly, energy efficient and ethically produced products a higher profile in KI's online purchasing system and in their own online product catalogues.*
- *To provide detailed information on how and to what extent environmental and social considerations are to be taken into account when selecting products and services from contracted suppliers.*
- *To arrange internal courses on environmental and social responsibility for purchasers when necessary.*

Overall objective: It is the responsibility of the Purchase and Procurement Unit to ensure that procurements exceeding the regulatory threshold level (for unrestricted direct procurements) are assessed from a sustainability perspective, and to decide when environmental and/or social requirements are to be imposed. Such requirements are to be monitored to the fullest extent possible.

Goal/measure: To evaluate the model for prioritising procurement processes from a sustainability perspective.

Approach: Monitor and evaluate the templates for procurement-related environmental and social requirements.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2016.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To develop a new key ratio model for sustainability requirements in KI's procurements.

Approach: Analyse and develop input data models.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2016.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To evaluate and develop statistics and input data for the requirements imposed on KI's procurements/purchases.

Approach: Analyse and develop input methods.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2016.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To monitor measures taken in the previous year (2016).

Approach: Monitor and evaluate measures taken to meet the environmental and social requirements imposed on procurements.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2017.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To introduce LCC (life cycle costs).

Approach: Training/instruction.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2017.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To introduce LCC in procurements where appropriate.

Approach: Apply the LCC principle to procurements.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2017.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To ensure that each category team produces sustainability targets for its category.

Approach: Monitor category management activities.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2017.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To monitor measures taken in previous years.

Approach: Monitor and evaluate measures taken to meet the environmental and social requirements imposed on procurements.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2018.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To apply the LCC principle to procurements where appropriate.

Approach: Apply the LCC principle to procurements where appropriate and monitors/evaluates outcomes.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2018.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To work strategically with category management.

Approach: Continue to monitor category management activities.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2018.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Goal/measure: To work strategically with monitoring imposed sustainability requirements.

Approach: Monitor category management activities.

Responsible body: The Purchase and Procurement Unit.

Timetable: 2018.

Resources: As allocated for in the Purchase and Procurement Unit's budget.

Departments (or the equivalent)

Departments (or the equivalent) actively ensure that environmental and sustainability requirements are imposed on direct procurements and orders under framework agreements where relevant.

Human Resources Office

Task: To bring KI's travel regulations into line with new laws and ordinances on the environmental impact of travel.

5. Duty travel and virtual meetings

The emission to air of carbon dioxide is one of the most important environmental aspects of KI and a field that should be given top priority in the university's continuing environmental and sustainability work.

As a global university, KI has an explicitly international profile for its research and education that entails both duty travel and virtual meetings. In accordance with its guidelines for the environment and sustainable development, KI is to reduce the climate impact of its duty travel. The government's appropriation document for the 2016 financial year for higher education institutions states that higher education institutions shall, in their efforts to reduce emissions of CO₂ from travel and transport, within the scope of their environmental management activities, use the methods produced under the Virtual Meetings in Public Agencies project (www.remm.se).

Goal: To reduce the climate impact from KI's duty travel by 3% from 1 January 2017 to 31 December 2018.

Approach: Proposed measures for greener travel:

- Draft new travel guidelines that include environmental aspects.
- Inform everyone at KI that we have a green travel policy.
- Carbon offset all flights.
- Insist that we must always book green transport.
- Offer only rail travel as an alternative for journeys up to 500 km; demand an explanation of those who choose air travel.
- Messaging – for bookings of trips under 500 km. Before booking a flight, send a text informing the person in question that rail travel is KI policy.
- Prioritise eco-labelled (Swan) hotels where framework agreements allow.
- Offer and hold twice-yearly courses for all departments on Skype for Business, video conferences and managing virtual meetings (Travel Manager responsible for this with support from the Premises Service Unit and IT Office).
- Skype for Business, video conferencing and virtual meetings: work out a process whereby every time someone books such a product, he/she can state that it is to replace physical travel. Monitor statistics and quantify what we have saved in terms of emissions and costs.
- Arrange competitions to see which department can reduce its travel most using Skype for Business, video conferencing and virtual meetings. Prize = money saved goes to the winning department.
- Produce a handy guide for the video conferencing room to simplify the use of the equipment, and post it on the travel pages.
- Update the travel pages with information about courses on virtual meetings.
- In all such development work, comply with the REMM project's suggestions and ideas. www.remm.se.

Responsible body: Travel Manager, Human Resources Office.

Timetable: 2016-2018.

Resources: As allocated for in the Human Resource Office's budget.

Monitoring: Progress is monitored ahead of the annual review of KI's environmental and sustainability work, and reported where applicable in KI's environmental report. The key ratio is the estimated total emission of CO₂ in kilo during the period.

Departments (or the equivalent)

- Provide internal information about KI's updated travel guidelines.
- Ensure the implementation of these guidelines.

The work done by the departments (or the equivalent) in the field is financed as allocated for by their respective ordinary budgets.

Goal/measure: To reduce the environmental impact of commuter travel.

Approach: Arrange campus bicycle events to promote cycling over more climate-impacting alternatives on campus (KI's Environmental Council in association with the Security and Environment Unit, the Health Promotion Unit, KI University Library and Akademiska Hus). Explore the possibility of erecting charging stations for cars on the campus; make it easier for staff and students to cycle to and from work by increasing the number of bicycle racks, erecting charging stations for electric bikes, renovating pump stations (if necessary), improving bicycle storage facilities, etc.

Responsible body: The Facilities Office, Environmental Council and Health Promotion Unit.

Timetable: 2016-2018.

Resources: As allocated for in the Facilities Office's, Environmental Council's, Health Promotion Unit's and KI University Library's respective budgets.

6. Competence

Task: To include information on KI's environmental and sustainability activities in the introduction package for new employees.

Goal/measure: To raise the competence of the KI staff as regards the environment and sustainable development.

Approach: Produce and launch in association with the Human Resources Office a brief, online introduction course on the environment and sustainable development for new employees and other members of staff; look into knowledge gaps and distribute information accordingly.

Responsible body: The Security and Environment Unit.

Timetable: 2016-2018.

Resources: As allocated for in the Security and Environment Unit's budget.

Departments (or the equivalent)

Ensure that all new employees take the online introduction course and that course completion is properly documented.

The Facilities Office

7. Energy use in buildings

Energy use is one of the most important environmental aspects of KI and a field that should be given top priority in the university's continuing environmental and sustainability work.

Task:

- **To achieve energy efficiency in leased premises in accordance with prevailing laws, ordinances, guidelines, etc. on energy efficiency in government authorities.**

- ***To impose environmental and energy requirements on all building, renovation and extension work in accordance with the above laws, ordinances, guidelines, etc.***
- ***Work to ensure that the measures identified in the landlord's energy declarations are actually carried out.***

KI leases its premises and works together with the landlord to promote energy efficiency for all building, renovation and extension work. Karolinska Institutet's guidelines for the environment and sustainable development require it to have effective and eventually climate-neutral energy consumption. There will be a great deal of relocation between 2016 and 2018 at KI, as old premises are vacated in favour of new, more energy-efficient buildings.

Overall objective: To reduce KI's per sq.m. energy usage by 25% by 2025 (averaging about 2% a year) on 2010 levels.

Goal/measure: To draw up a clearer objective and strategy for KI's energy efficiency work on its premises.

Approach: Engage a consultant in the production of a clearer objective and strategy for the continuing energy efficiency drive and its follow-up. The tendering process for this is expected to be completed by Q1 2017, with measures planned for start in 2017.

Responsible body: The Premises Planning Unit.

Timetable: 2016-2018.

Resources: Consultancy costs covered by the Premises Planning Unit's budget.

Goal/measure: To implement measures and monitor the energy efficiency work done on the basis of the above objective and strategy in order to achieve greater energy efficiency on KI's premises.

Approach: With reference to the above objective and strategy and the help of the procured energy consultancy service, the unit, in collaboration with the landlord, distributes information, prioritises and implements measures, and monitors the continuing energy efficiency work.

Responsible body: The Premises Planning Unit.

Timetable: 2017-2018.

Resources: Consultancy costs and the costs of minor measures covered by the Facilities Office's budget. Any measures taken are decided upon as separate projects.

Departments (or the equivalent)

Departments (or the equivalent) actively contribute to KI's energy efficiency work in accordance with the objective and strategy. The work done by the departments (or the equivalent) in the field is financed as allocated for by their respective ordinary budgets.

Task: *To conduct energy-saving projects with the landlord.*

Overall objective: To continue the development of the energy efficiency programme.

Goal/measure: To take measures to enhance energy efficiency in the steam supply network (steam mains).

Approach: Continue to plan measures to reduce losses in the inefficient steam supply network (about 70% of the steam produced) with the aim of completing implementation in 2017.

Responsible body: The Premises Planning Unit.

Timetable: 2016-2018.

Resources: As allocated for in the media costs budget.

Goal/measure: To make light sources of the highest energy efficiency class the preferred choice for lighting installations.

Approach: Continue to look into using LED lighting in the Scheele laboratory. In all other cases, energy efficient light sources are to be the preferred choice for new light installations if cost-effective, economically viable, sustainable (in the wider sense of the word), technically feasible and sufficiently competitive.

Responsible body: The Premises Planning Unit.

Timetable: 2016-2018.

Resources: As allocated for in the The Premises Planning Unit's budget.

Goal/measure: To increase the number of solar panels.

Approach: Work with Akademiska Hus to review possible locations for the continuing expansion of the solar energy programme at KI.

Responsible body: The Premises Planning Unit.

Timetable: 2016-2018.

Resources: As allocated for in the Facilities Office's budget for KI's share of the financing.

Goal/measure: To carry out energy-efficiency measures in the running of premises on the Solna campus in association with Akademiska Hus.

Approach: Akademiska Hus has suggested 6 different measures, including the replacement of heat recovery batteries in 95:01, 95:08 and 95:47, 95:60 and the re-installation of more energy-efficient fans and heat recovery pumps in 95:47.

Responsible body: The Premises Planning Unit.

Timetable: 2017-2018.

Resources: As allocated for in the Facilities Office's budget for KI's share of the financing.

Monitoring: Progress is monitored ahead of the annual review of KI's environmental and sustainability work, and reported where applicable in KI's environmental report. The key ratio is the total annual energy usage in KWh per AWU and per sq.m.

8. Fire

Overall objective: To take preventative action to reduce the risk of fire and related personal injury and/or environmental damage.

Goal/measure: To ensure that flammable goods are stored in accordance with the law, with the permit issued by the Rescue and Emergency Services and with KI's own internal rules.

Approach: Support and training for Supervisor Flammable goods and controllers.

Responsible body: Security and Environment Unit coordinates; operational responsibility falls to each operational unit.

Timetable: 2016 and onwards.

Resources: The departments must budget for possible purchases of fireproof cabinets or the cost of creating a fireproof room. Human resources as allocated for in the departments' and the Security and Environment Unit's respective budgets.

Goal/measure: To carry out evacuation drills. Clear information, communicated within KI, concerning the resources and facilities that exist for exercise and training within the fire safety area.

Approach: Provider of evacuation drills procured. Information on drills and training within the fire safety area is available on the internal website; additional communication efforts are required so that all operating areas within KI are familiar with this.

Responsible body: The Security and Environment Unit ensures that the resources and facilities are made available; it is the responsibility of the operational units to ensure that the drills are conducted.

Timetable: 2016 and onwards.

Resources: As allocated for in the Security and Environment Unit's budget.

Goal/measure: To offer training in the handling of flammable goods; to hold 1-2 courses a year for Supervisors Flammable goods, and produce and to offer training for Controllers Flammable goods.

Approach: Training for Supervisors Flammable goods will be provided in May 2016 for new managers and existing managers who wish to brush up their knowledge of flammable goods. The aim in 2016-2018 is to hold 1-2 courses/year for Supervisors Flammable goods.

Course material for Controllers Flammable goods is being prepared, and once ready the courses will be held as soon afterwards as possible in 2016-2018. The courses will be created as needed.

Responsible body: The fire safety coordinator at the Security and Environment Unit.

Timetable: 2016 and onwards.

Resources: As allocated for in the Security and Environment Unit's budget.

Goal/measure: To arrange meetings for the departmental fire safety supervisors at least once a year.

Approach: Role descriptions with accompanying delegation templates are designed to create a common foundation for the work done by the departments on fire safety issues and for collaboration between the University Administration and the departments. A meeting is to be arranged for all delegated departmental fire safety supervisors in the second half of 2016. Information on fire safety strategies at KI will be issued and discussed as part of the university's communication, cooperation and improvement work.

The responsibility of the departmental fire safety supervisors, as defined in the role description, is to ensure that fire training and evacuation drills are carried out (with the possible assistance of KI's procured fire training provider).

Responsible body: The fire safety coordinator at the Security and Environment Unit convenes and facilitates at the meetings.

Timetable: 2016-2018.

Resources: As allocated for in the Security and Environment Unit's budget as regards arranging meets for fire safety supervisors. The responsibility of the departmental fire safety supervisors, as defined in the role description, is to ensure that fire training and evacuation drills are carried out (with the possible assistance of KI's procured fire training provider).

Goal/measure: To ensure that the KI website is the go-to place for information about fire safety at KI in both Swedish and English.

Approach: Rewrite the internal web page on fire safety from scratch to better reflect the current focus of KI's fire safety activities; update links to relevant documents and other internal pages, and translate the page itself into English.

Responsible body: The fire safety coordinator at the Security and Environment Unit.

Timetable: 2016 and onwards at regular intervals.

Resources: As allocated for in the Security and Environment Unit's budget as regards producing material for the KI intranet. Support has been requested from the Communications and Public Relations Office's pool of communication consultants for 2016. The internal web page will be regularly updated, mainly with the support of the pool of communication consultants.

Goal/measure: To use a new digital self-monitoring system from Nordic Port to more easily obtain a thorough overview of how KI as a whole manages its self-monitoring, and what the results of these controls are.

Approach: A new digital self-monitoring system was purchased in 2016 from Nordic Port AB to form part of the KLARA chemicals database (also supplied by Nordic Port).

Responsible body: The fire safety coordinator at the Security and Environment Unit.

Timetable: Implementation to begin at some time in autumn 2016, with completion scheduled for 2018.

Resources: For the system to function as intended, fire cell drawings will need to be made available for the buildings in which KI operates. This will require, in turn, correct plans from Akademiska Hus and a major update of the Pythagoras drawings database. The update is judged to be too comprehensive to do with our own resources and will therefore be implemented as a project in 2016. Project funding for this has been taken up in the budget for 2016.

Monitoring: There will be more monitoring opportunities of and within the departments than at present, while a general overview can be delivered in connection with inspections by the Rescue and Emergency Services.

Departments (or the equivalent)

Departments (or the equivalent) are to ensure that fire safety roles are filled and that everything is in place for KI's evacuation organisation to be able to function as intended (evacuation stations).

Measures to ensure the correct handling of flammable goods shall be budgeted for by the departments, which should also cover the cost of fire drills and training.

Task: To minimise the health risks of KI's laboratory activities

KI is a research university and thus oversees a great deal of laboratory work. Karolinska Institutet's guidelines for the environment and sustainable development require KI to minimise the health and environmental risks of its laboratory activities.

9. Chemicals

Goal/measure: To endeavour to minimise the volume of chemical products and increase the level of safety in the storage of hazardous chemicals.

Approach: Increase the number of operational units that use the KLARA bar code system in KI's laboratory environments; provide information and arrange courses.

Responsible body: The Security and Environment Unit.

Timetable: Regularly.

Resources: As allocated for in the Security and Environment Unit's budget.

Goal/measure: To enhance safety as regards the environment and working environment and improve fire safety in KI's laboratories.

Approach:

- A new and more flexible risk assessment module in KLARA is under development and is scheduled to be ready for use in Q4 2016. The new module will make it more possible to customise risk assessment forms for each laboratory, thus simplifying risk assessment procedures. It will also make it easier to risk assess more complex risk management involving different sources of risk (e.g. animals, infectious material and chemicals).
- Prepare and run training courses.
- Write information material for the KI intranet.

Responsible body: The Security and Environment Unit.

Timetable: The risk assessment module is planned to be ready for use in Q4 2016. Training and information material to be produced in spring 2017.

Resources: As allocated for in the Security and Environment Unit's budget.

Departments (or the equivalent)

Departments in which laboratory activities are conducted are to improve the nature and quality of their risk assessments. The new version of the risk assessment tool will simplify and facilitate risk assessment, quality and monitoring activities while improving conditions for this work.

Goal/measure: To work generally with the substitution, phase-out and reduction of hazardous chemical products and reducing volumes of 11 selected substances (“KI’s reduction list”) by 2018.

Approach:

- KI’s operational units shall substitute CMR substances with less hazardous alternatives if technically and scientifically feasible. This applies to all units able to influence volumes of CMR substances (e.g. laboratory and clinical units, procurement and purchasing).
- Implement KI’s reduction list in all operational units through information material; prepare and use a questionnaire for reporting and monitoring products that contain listed substances.
- Implement on existing study programmes.

Responsible body: The Security and Environment Unit.

Timetable: 2016-2018.

Resources: As allocated for in the Security and Environment Unit’s budget.

Monitoring: A chemicals inventory will be made in early 2019, from which it will be seen whether volumes of the 11 selected substances have decreased.

Departments (or the equivalent)

Research groups are to work actively to reduce the volume of chemicals with carcinogenic, mutagenic or reprotoxic (CMR) properties when sourcing laboratory substances, chemicals for the operation and maintenance of equipment and other goods.

It would be best if each operational unit’s purchasing manager (or the equivalent) is in charge of making this happen.

Goal/measure: To work preventatively with environmental and sustainability issues with the aid of reported anomalies.

Approach: Have a functional and implemented system for the different types of anomaly handled under KI’s management system for the environment and sustainable development; test the launched modules for the working environment and safety in KI’s incident reporting system – including environmental incidents – that was rolled out in spring 2016; examine the need to add a supplementary module for pure environmental anomalies and, if necessary, produce a requirement specification to develop the anomaly management system so that it meets the requirements that the ISO 14001 standard imposes on KI’s management system; plan and implement procedures for managing environmental anomalies.

Responsible body: The Security and Environment Unit.

Timetable: 2016-2017.

Resources: As allocated for in the Security and Environment Unit’s budget.

Departments (or the equivalent)

Use KI's incident reporting system to report anomalies at a central level. Assess their cause, act and monitor local deviations. Follow KI's procedures for managing environmental anomalies when available.

Goal/measure: To implement new procedures and digital systems for compliance control under KI's management system for the environment and sustainable development in order to increase people's knowledge and understanding of KI's compliance status.

Approach: Add questions to KI's inspection checklist on control and compliance regarding the environment and sustainable development within the framework of KI's management system for the environment and sustainable development; examine, evaluate and implement digital tools for compliance control regarding the environment and sustainable development; produce and implement procedures for this.

Responsible body: The Security and Environment Unit.

Timetable: 2016-2017.

Resources: As allocated for in the Security and Environment Unit's budget.

Departments (or the equivalent)

Use KI's compliance control checklist for environment and sustainability and follow KI's procedures for compliance control when available.

Task: To help increase the amount of waste sorted at source and reduce waste volumes.

10. Sorting waste at source and reducing waste

KI's policy is to follow the EU waste hierarchy. KI has waste guidelines for sorting at source and rules for handling laboratory waste, and is required by its guidelines for the environment and sustainable development to sort its waste at source and reduce waste volumes.

Goal/measure: To increase the degree of sorting at KI.

Approach: Examine existing waste handling procedures and fraction volumes and identify areas of improvement; increase the number of fractions in common spaces, if necessary, such as lunch rooms and staff kitchens; and make information available and instructions for sorting waste to all staff and visitors both online and through courses.

Responsible body: The Security and Environment Unit, the Facilities Office.

Timetable: 2016-2018.

Resources: As allocated for in the Facilities Office's and Security and Environment Unit's budgets.

Goal/measure: To offer a service/advertising site for the internal exchange of e.g. fixtures, fittings and consumables between KI's operational units that are not depended on storage spaces.

Approach: Examine the possibility of offering an online service/advertising site for the internal exchange of e.g. fixtures, fittings and consumables between KI's operational units that are not depended on storage spaces – a service similar to Karolinska University Hospital's internal "Return" service; decide on an appropriate solution and implement it.

Responsible body: The Facilities Office.

Timetable: 2016-2018.

Resources: As allocated for in the Facilities Office's budget.

Goal/measure: To recycle furniture and equipment to the fullest practical extent given the major relocation and premises vacating programme that KI is facing for the period.

Approach: Examine the matter and produce a strategy for the re-use of office equipment, instruments and other such fittings before relocation, taking account of the environment, financial resources and safety; decide on an appropriate solution and implement it.

Responsible body: The Facilities Office.

Timetable: 2016-2018.

Resources: As allocated for in the Facilities Office's budget.

Departments (or the equivalent)

Departments (or the equivalent) endeavour to increase the degree of waste sorting and recycling, to reduce waste volumes and to ensure that information and instructions for sorting waste are kept up to date and accessible and that suitable facilities are provided.

Task: To post online information about opportunities for video conferencing in KI's teaching rooms and offer training when necessary.

Goal/measure: To reduce the need for travel by increasing the use of KI's video conferencing equipment.

Approach: See under "Duty travel and virtual meetings".

Responsible body: Service Unit.

Timetable: 2016-2018.

Resources: As allocated for by the Service Unit's budget in association with Travel Manager and the IT Office.

11. Green campus

Goal/measure: To introduce a sustainability perspective on KI's campuses.

Approach: Work alongside e.g. Akademiska Hus to ensure that a sustainability perspective informs future campus plans at KI; enhance biodiversity and ecosystem services on campus.

Responsible body: The Facilities Office

Timetable: 2016-2018.

Resources: As allocated for by the Facilities Office's budget.

The Communications and Public Relations Office

12. Communication and public relations

Branded products

Task: *To work with the Purchase and Procurement Unit to ensure that the university's branded products are procured with account taken of their environmental and social aspects.*

Goal/measure: KI's branded products are procured with account taken of their environmental and social aspects.

Approach: Ensure that environmental and sustainability are taken into account on the procurement of branded products.

Responsible body: The Communications and Public Relations Office.

Timetable: 2016-2017.

Resources: As allocated for by the Communications and Public Relations Office's budget.

Communication

Goal: To reduce print runs.

Approach: Review current stocks of printed material produced by the office for the university at a central level (including Medical Science) and volumes of printed material on order so print runs can be matched to the demand.

Responsible body: The Communications and Public Relations Office.

Person responsible for implementation: Anki Israelsson

Timetable: 2016.

Resources: As allocated for by the Communications and Public Relations Office's budget.

Goal/measure: To produce relevant internal and external information about KI's work in environment and sustainability.

Approach: Produce a communication plan for the environment and sustainable development.

Responsible body: The Communications and Public Relations Office.

Timetable: 2016-2017.

Resources: As allocated for by the Communications and Public Relations Office's and the Security and Environment Unit's budget.

Goal: Reduce volumes of printed matter by at least 20 %.

Approach:

- Order printed material on the basis of the previous year's circulation figures; minimise runs of newly printed material. (Anki Israelsson)
- Reduce the number of personal copies sent out to 1 per person. Orders of more copies to be reviewed first by the Communications and Public Relations Office. (Anki Israelsson)
- Digitalise KI Bladet. (Madeleine Svärd Huss)

Responsible body: The Communications and Public Relations Office.

Timetable: 2017.

Resources: As allocated for by the Communications and Public Relations Office's budget.

Goal/measure: To reduce the number and volume of printed information material, brochures, etc.

Approach: Find alternatives to the printed information material that can be ordered via www.ki.se, e.g. via download, email or memory stick for external distribution at meetings, conferences etc. This would reduce KI's environmental impact by saving paper and eliminating distribution (the whole world can order material).

Responsible body: The Communications and Public Relations Office.

Timetable: 2016-2018.

Resources: As allocated for by the Communications and Public Relations

Goal: To produce only small runs of printed material exclusively for internal use.

Approach: Remove the option to order printed material online.

Responsible body: The Communications and Public Relations Office. (Anki Israelsson)

Timetable: 2018.

Resources: As allocated for by the Communications and Public Relations Office's budget.