

SKA rating for Higher Education

Introduction to scheme by Elina Grigoriou

October 2016

1pm Introduction to scheme

2pm Workshop around focus issues

3pm Break

3.15 Scheme differences & selection

4pm Questions and discussion

- ▶ SKA rating overview
- ▶ Philosophy and methodology
- ▶ Benefits and drivers

- ▶ SKA for Higher Education (SKA HE)
- ▶ Introduction and development process insight
- ▶ Assessment process
- ▶ Strategic features of the HE scheme
- ▶ General sources and information

Andrea Blue - Head of Practitioner Products

Nicola Stead - Product Development Executive

Nicola Nixon - Digital Marketing Executive

Isobel Dobney – Training Product Development Specialist

Presenting...

Elina Grigoriou - Design & Sustainability Director at Grigoriou Interiors

- chair of the SKA rating Technical Committee
- RICS SKA team Technical Advisor, and
- Development Partners of all schemes.

What is SKA rating?

SKArating®

- ▶ SKA rating is an environmental assessment tool for sustainable fit-outs.
- ▶ There are 3 schemes:
 - SKA retail v1.0
 - SKA offices v1.2
 - SKA HE v1.0
 - Pilots
- ▶ SKA is aimed at both category A and category B fit-outs.
- ▶ SKA assessors are accredited by RICS and undergo 3rd party auditing.



SKA rating Philosophy

- ▶ Project Driven
- ▶ Incentivise Good Practice
- ▶ Robust scoring system
- ▶ Easy to use
- ▶ Free to use

Main Characteristics

- ▶ Measures 100% of the fit-out
- ▶ Lightweight & simple
- ▶ Offices v1.2 – Retail v1.0 – Higher Education v1.0 - Pilots
- ▶ Does not rely on base build credits
- ▶ Assessor Driven
- ▶ Accreditation by RICS

- ▶ Project Certification £295 + VAT per certificate (06.2016)
- ▶ *...benchmarking against industry good practice.*

Key benefits

- ✓ Achieves a measure of sustainability for fit-outs (greener buildings).
- ✓ Improves energy and water management.
- ✓ Reduces operating costs.
- ✓ Benchmarks fit-outs across a portfolio of buildings and estates.



- ✓ Increases asset value with a low carbon building.
- ✓ Included in Green Lease provisions.
- ✓ Reporting: CSR (Corporate Social Responsibility).
- ✓ Improves occupier engagement and wellbeing.

The Benefits of Green Buildings

SKArating®

OUTSIDE VIEWS



Mental Function
& Memory

10-25%
BETTER



Call
Processing

6-12%
FASTER



Hospital
Stays

8.5%
SHORTER

DAYLIGHT



Students achieve

5-14%
HIGHER TEST SCORES
20-26%
and learn FASTER

Workers are
MORE PRODUCTIVE

18%



15-40%
INCREASE
in Retail Sales

SYSTEMS



Productivity Increases by

23%
from better lighting



11%
from better ventilation



3%
from individual temperature control

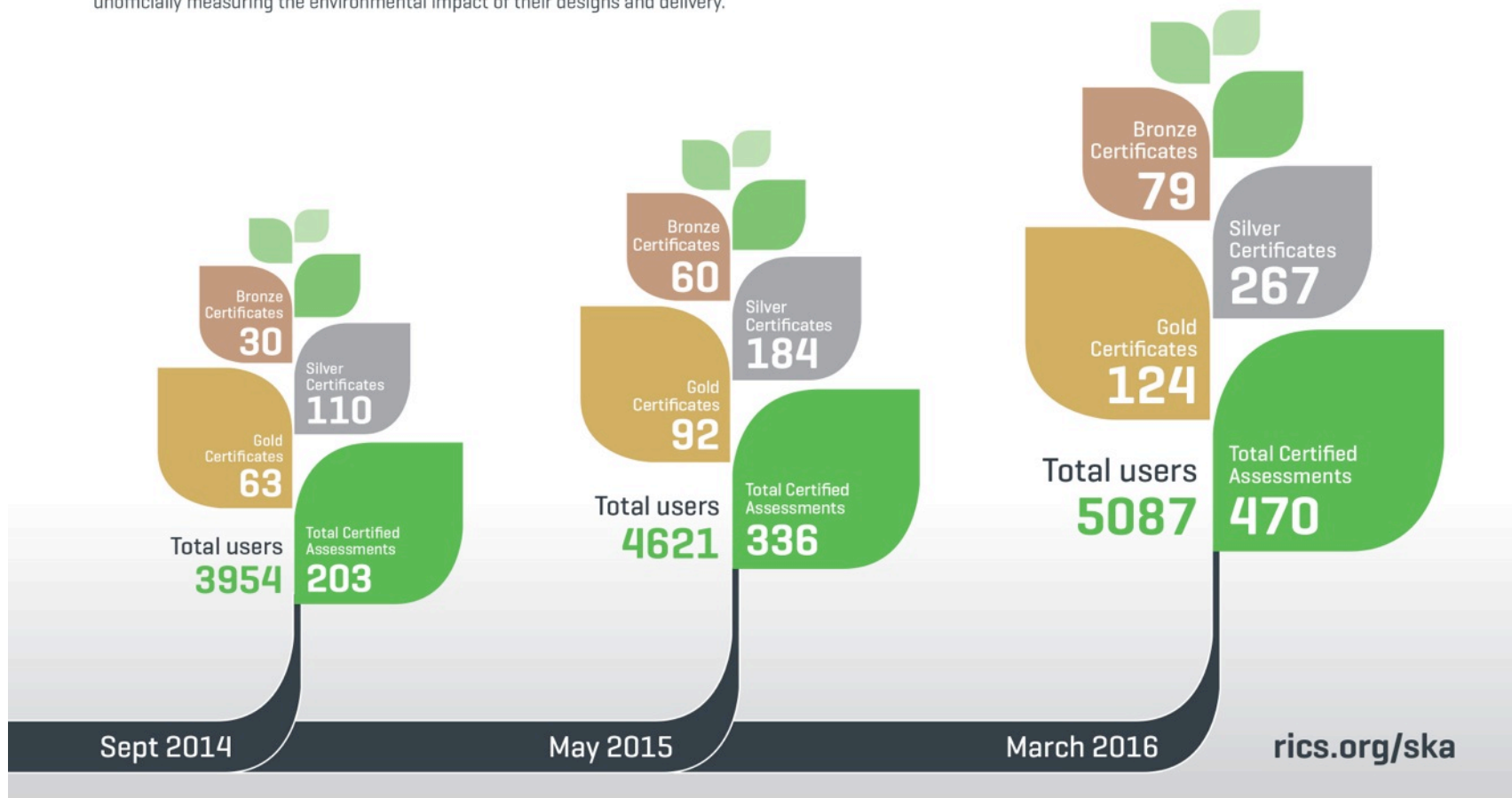
The growth of SKA rating

SKArating®

The growth of SKA rating certified projects

The steady growth of the tool can be seen in the sharp increase of certified projects year on year. Other indicators include the number of users on the freely accessible online tool and available Good Practice Measures and users unofficially measuring the environmental impact of their designs and delivery.

SKArating®



SKA HE introduction and overview

- SKA HE has been created to reflect the needs of Higher Education estate, including labs and lecture theatres
- c.200 HEIs (Higher Education Institutions) are undertaking 1000s of refurbishments and small scale refits every year
- 30 universities – e.g. City, Liverpool and UCL - have already used SKA
- The new scheme launched in **May 2016**
- A new web class for SKA assessors is available and already there are accredited assessors available to assess HE projects.

- ▶ HEFCE (Higher Education Funding Council for England) requires HEIs to have a long term carbon management plan.
- ▶ Public nature of HE institutions gives high visibility and reputational risk/edge.
- ▶ Informed student clients. Peer benchmarking.
- ▶ Supporting University/college wider sustainability plans.
- ▶ Solution to meet Energy legal requirements and public reporting.
- ▶ Rising energy, water, waste and material costs.
- ▶ Supports wider green building efforts.



Photos by Ana Escobar



Energy Act 2011

SKA HE Developments Partners

SKArating®



Research & Contributor Team



The development of the SKA rating good practice measures for higher education was led by the SKA rating technical committee with the involvement of the industry.

The members of the committee were:

Elina Grigoriou, Grigoriou Interiors

Joe Cilia, The FIS

Dave Cheshire, AECOM

Richard Hollis, AECOM

David Wakelin, Mace

Andy Green, Exova BM Trada

Brian Murphy, National Green Specification

Charlie Law, Sustainable Construction Solutions

Kim Karina, Maraq

The committee and RICS would also like to thank those who made other contributions to the development of SKA rating good practice measures for higher education through authorship, research, feedback, information and ideas:

Roger Bond, AUDE

Alan Fox, AECOM

Peter James, S-Lab

Richard Jackson, UCL

Evan Landy, UCL

Ben Stubbs, UCL

Joe Croft, Overbury

Sam Bensky, RLB

Brenda Scott, AECOM

Andreia Guerra, Ramboll

Camilla Read, Overbury

Lachlan Fulton, RLB

Heather Evans, RLB

Nicola Hogan, Goldsmiths College

Jess James, Price & Myers

Benjamin Stroud, AECOM

Hari Haren, Imperial College London

Ann MacLachlan, King's College London

David Williams, University of Liverpool

Mark Suffield, University of Liverpool

Stephen Corran, University of Liverpool

Clare Casey, University of Liverpool

Ian Lane, University of the Arts London

Helen Cutts, University of Manchester

Azita Dezfouli, Sweett Group

Elizabeth Greenhill, Sweett Group

Steve White, MCM

Gareth Brown, WRAP

Becci Taylor, Arup

Michael Cross, Wilmott Dixon

Sara Kassam, CIBSE

Peter Kelly, ISG

David Anderson, UCL

Stephanie Chesters, UCL

Joanna Marshall-Cook, UCL

Matthew Edis, SCS Partnership

Vic McGrath, CBI

Jason Clarke, City University

Tim Bramley, FDG Fairhursts

and all those who participated in the public consultation of the draft measures.

RICS is committed to the continuous development and improvement of the SKA rating system and would like to hear further feedback on these measures at any stage. Please email any comments to ska@rics.org

- ▶ 131 Good Practice Measures
- ▶ 1 new Impact category; Ecology
- ▶ More circular approach for Materials and Waste
- ▶ 1st scheme to include campus wide issues

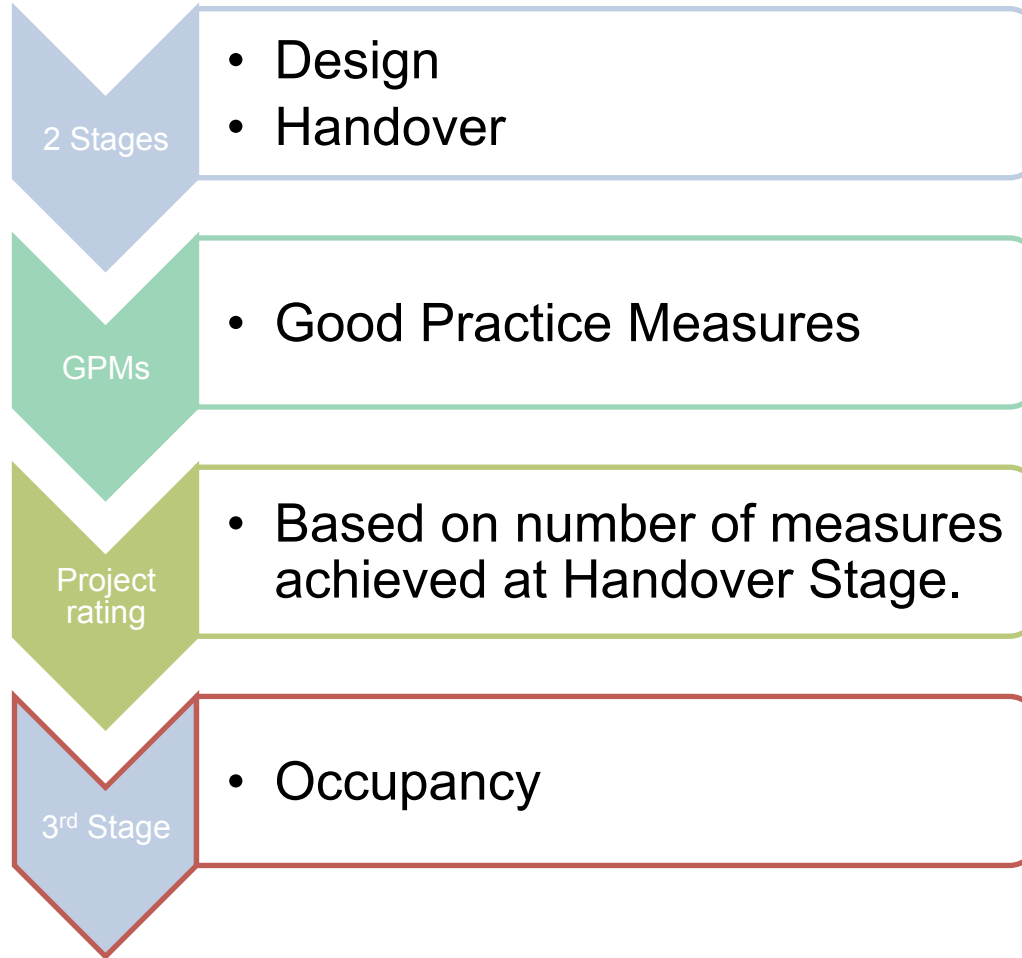
The scheme covers all these type of areas...

- ▶ Café, retail and restaurant
- ▶ Office, classroom and auditoria
- ▶ Laboratories
- ▶ Art and machine workshops
- ▶ Maintenance and circulation areas
- ▶ Reception and exhibition spaces

Not in scheme areas such as...

- ▶ Veterinary spaces
- ▶ Student accommodation/halls of residence
- ▶ Hospitals

The assessment process



Good Practice Measures

SKArating®

Timber

Criteria

100% of timber used is from at least one of the following sources:

- is reclaimed;
- where new or recycled content timber is used, is supplied with a Chain of Custody (CoC) from one of the following schemes only:
 - Forest Stewardship Council (FSC);
 - Programme for the Endorsement of Forest Certification (PEFC); or
 - Grown in Britain (GiB).
- project achieves full FSC or PEFC project certification.

Scoping

This measure applies if timber is specified or installed. This includes hardwoods, softwoods, joinery, timber panel products (e.g. MDF, plywood), composite timber, wood veneers in permanent installations and temporary site timber. It also includes all timber found in furniture products, supplied through the main contract or directly procured by the client.

Assessment

At design stage: check specifications explicitly reference at least one of the above criteria. Grown in Britain licensed timber may be a preference in addition to FSC and/or PEFC.

At handover stage: collate delivery notes or invoices responding to the criteria for installed products. All delivery notes or invoices for new or recycled timber and timber products must detail the quantity, type of product purchased and state the Chain of Custody number for the final handler of the product prior to it being installed on site.

Where a CoC number is missing for the final step in the timber handling chain, comprehensive category B evidence will be acceptable to claim 'sustainable timber' is used on the project but not to publicly claim that a certified product has been purchased. Note that if it is intended for the project to be certified independently by FSC, category B evidence will not be accepted.

At occupancy stage: if timber has been changed or added, carry out the handover stage assessment. If this measure was achieved at handover stage and timber has not been changed or added, this measure will be achieved by default.

Rationale

The aim is to reduce the use of unmanaged timber in construction/fit-outs, and consequently to reduce the environmental impact of forestry by ensuring timber originates from sustainable sources. Sourcing reclaimed timber is the most sustainable option.

Fit-out benchmark & assessment tool

Materials

Issue

D20

ID

126

Rank

SKA Higher Education
Version 1.0 2016

If you would like to comment on this measure please email ska@rics.org

© RICS 2016

Page 1 of 2

Doors

Criteria

All doors, including frames, meet at least one of the following criteria:

- are re-used;
 - if new:
 - are manufactured in a factory that has achieved and maintains an Environmental Management System in accordance with ISO 14001 with either (or a combination of both):
 - composite materials that have at least 80% recycled content; or
 - metal components that follow WRAP's Choosing construction products guide (see guidance) and contain average recycled content figures as follows:
 - steel section 15%;
 - stainless steel 75%;
 - copper sheet 60%;
 - aluminium extrusion 44%; and
 - aluminium sheet 73%.
 - are supplied with an environmental product declaration, written in accordance with ISO 14025 standard; and
 - if containing timber components, the timber meets the criteria of good practice measure D20 Timber.
- Any recycled and recyclable content claims must:
- comply with ISO 14021:2016 Environmental labels and declarations - Self-declared environmental claims; and
 - state IQ emissions.

Scoping

This measure applies if doors are specified or installed. Ironmongery is currently not included in the assessment.

Assessment

At design stage: check specifications explicitly reference at least one of the above criteria or specify a product that meets the criteria.

At handover stage: collate delivery note or invoice for installed products responding to the criteria or obtain a statement of retention/issue of existing doors.

At occupancy stage: if doors have been changed or added, carry out the handover stage assessment. If this measure was achieved at handover stage and doors have not been changed or added, this measure will be achieved by default.

SKArating®

Fit-out benchmark & assessment tool

Materials

Issue

M17

ID

86

Rank

SKA Higher Education
Version 1.0 2016

If you would like to comment on this measure please email ska@rics.org

© RICS 2016

Page 1 of 2

Sustainability issue categories

- Energy & CO₂ emissions
- Waste
- Water
- Materials
- Pollution
- Wellbeing
- Transport
- Project Delivery
- Ecology

SKA ranking



- Offices v1.2 – 1 to 109
- Retail v1.0 – 1 to 112
- HE v1.0 – 1 to 131



SKA rating ID

- **Design:** Design & construction process
- **Equipment:** Efficiency of energy & water-using equipment.
- **Materials:** Lifetime environmental impacts of materials.
- **Performance:** Quantitative performance measures.

Occupancy Stage Assessment

- Starts 1 year after Handover Stage
- Window to complete within first 2 years
- Good Practice Measures can be added
- Number of GPMs only apply to this stage
- Result independent of Handover Stage
- Can improve/reduce certificate rating

Design stage	Approved
Current  Gold Included: 57	Target  Gold Targeted: 57
View assessment	

Handover stage	Certified
Current  Gold Achieved: 52	Target  Gold Targeted: 52
View assessment	

Occupancy stage	Not started
At the current time, the occupancy stage for Ska Offices 1.0 projects is not available. Please check again later.	

The SKA rating online tool

SKArating®

SKArating®



Welcome to the RICS Ska Rating Online Assessment Tool

This tool allows property and construction professionals and Ska Assessors to design, specify, rate and certify fit-out projects for environmental impact, using the SKA Rating fit-out benchmark system. Use of the tool is free and open to all. Projects can be certified by qualified assessors for an additional fee.

Not registered? [Register now](#). It's free!

Login

Email

Password

Login

[Forgotten your password?](#)



Rating summary and certificate

SKArating

Fit-out Sustainability Assessment

This is to certify that

42 Acacia Avenue
Anytown
AT1 2AW
United Kingdom

Has achieved the SKA Rating of

Silver

SKArating
silver

Accredited Assessor
On behalf of
Architect
Chief of police
Contractor
Interior designer
Project manager
Certificate reference
Date
This certificate has been produced using SKA Rating for Offices version 1.2

SKArating

Projects

Account

Help

Elina Grigoriou | [Log Out](#)

Bilfinger GVA New City Office

Ska Offices 1.2

Handover stage

Project details

Scope

Assessment

Rating

Report

Certificate

Summary

Status: **Certified**

Measures in scope: **85**

Measures targeted: **72**

Measures achieved: **68**

Targeted rating



Rating: **Ska Rating Gold**

Threshold: **64**

Gateways required: **16**

Achieved rating



Rating: **Ska Rating Gold**

Threshold: **64**

Gateways required: **16**

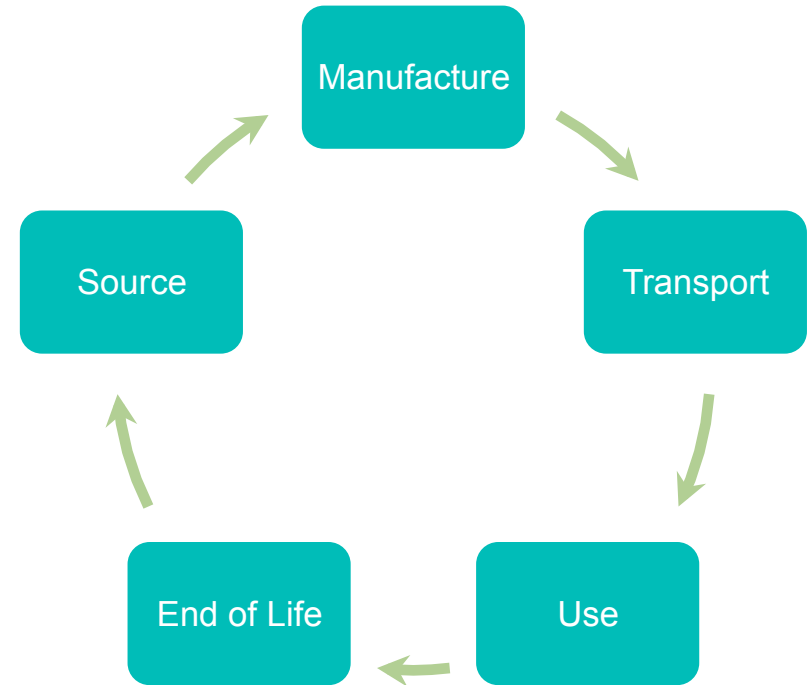
Issue	In scope	Targeted	% Targeted	Achieved	% Achieved
Energy	14	14	100%	11	78.57%
Materials	25	17	68%	16	64%
Pollution	6	5	83.33%	5	83.33%
Project Delivery	3	3	100%	3	100%
Transport	2	2	100%	2	100%
Waste	16	16	100%	16	100%
Water	6	6	100%	6	100%
Wellbeing	13	9	69.23%	9	69.23%
TOTALS	85	72	84.71%	68	80%

Evolution of principles and changes

Evolution of SKA principles

The use of SKA drives efforts to...

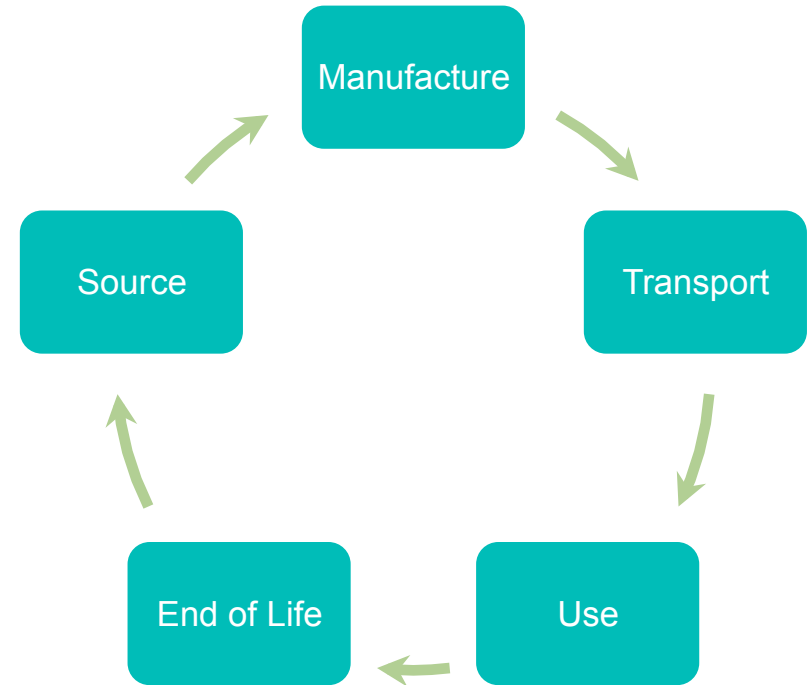
- ▶ Conserve resources
- ▶ Reduce pollution
- ▶ Increase occupant wellbeing
- ▶ Available data for reporting
- ▶ Reduce running costs
- ▶ Drives environmental improvements



Evolution of SKA principles

The use of SKA drives efforts to...

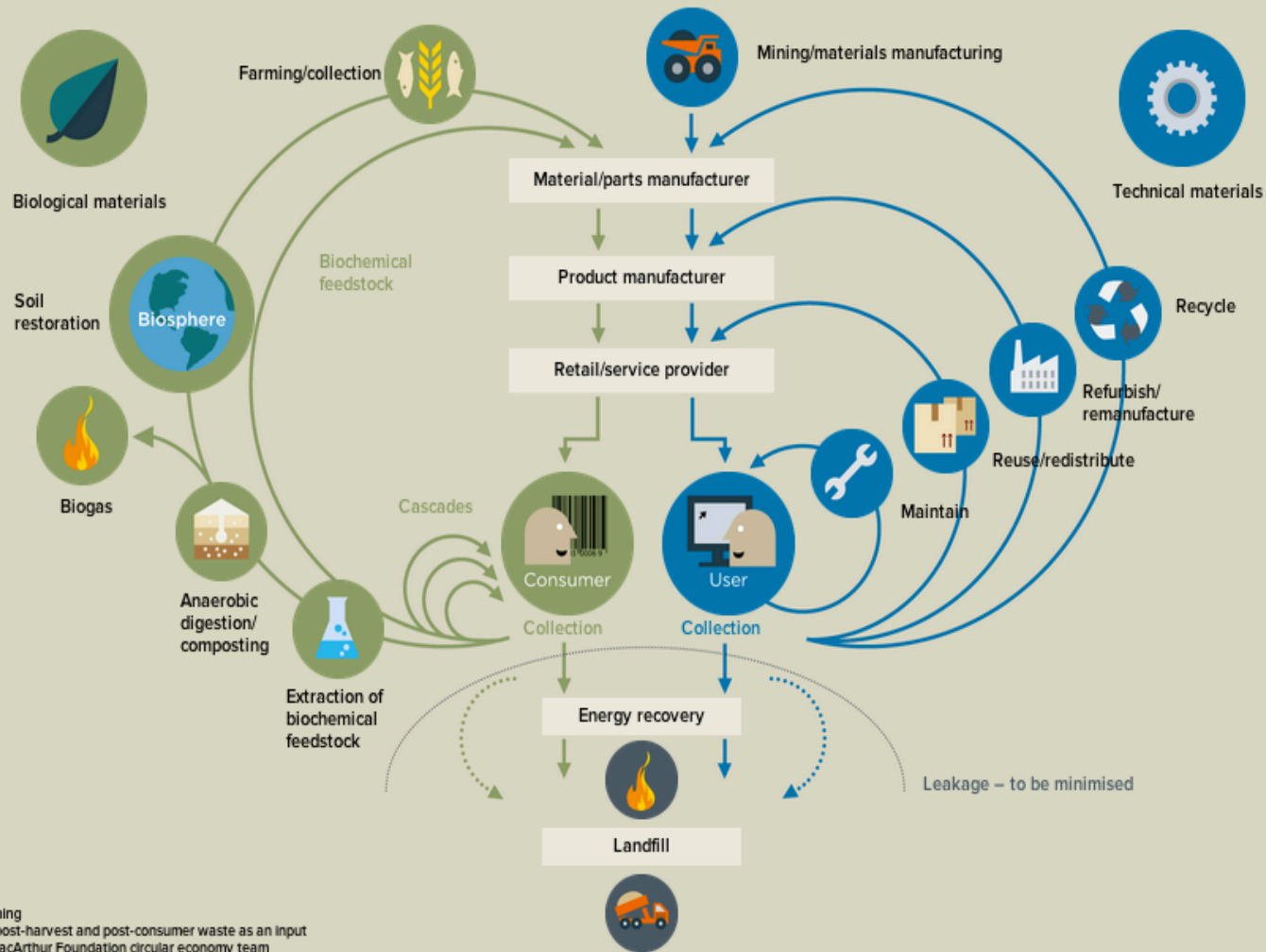
- ▶ Conserve & **re-use** resources
- ▶ Reduce & **eliminate** pollution
- ▶ Increase & **drive** occupant wellbeing
- ▶ Available data for
- ▶ Reduce running costs
- ▶ Drives environmental improvements



What is a **circular economy**?

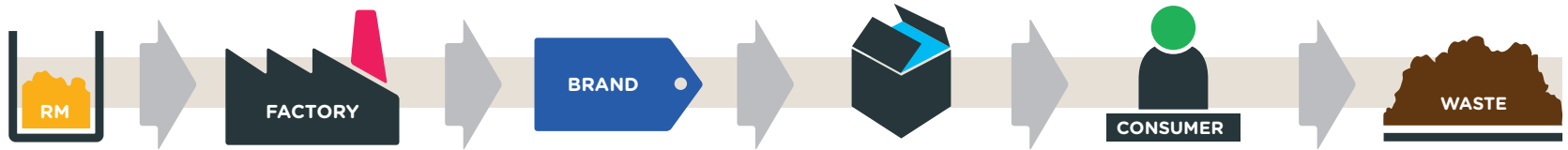
What does Cradle to Cradle mean?

THE CIRCULAR ECONOMY AN INDUSTRIAL SYSTEM THAT IS RESTORATIVE BY DESIGN

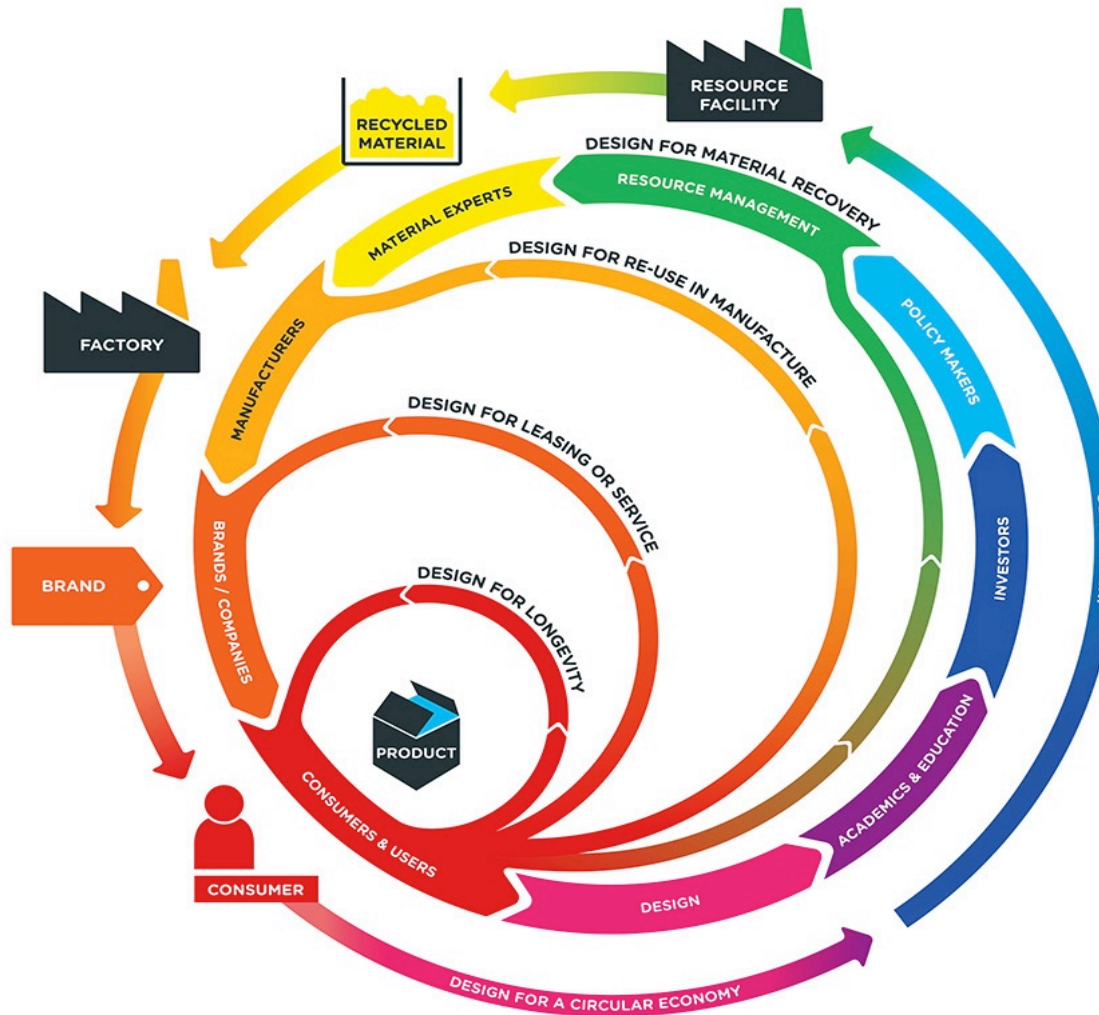


THE GREAT RECOVERY

Take Make Dispose

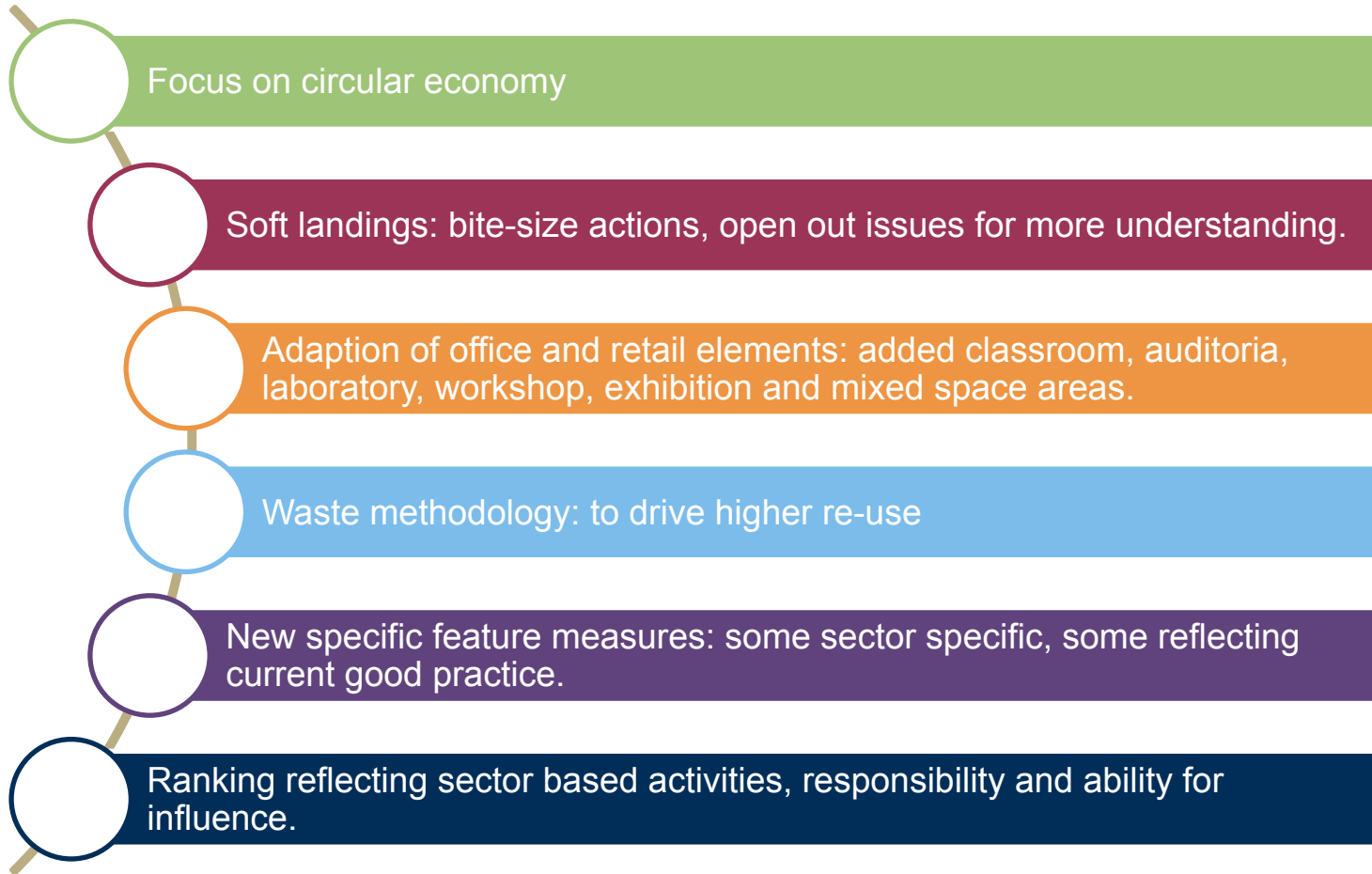


The circular economy



THE
GREAT
RECOVERY

Changes from Retail and Office schemes



Removed GPMs...

- ✗ P09 DEC
- ✗ E07 Pipework insulation
- ✗ D53 Electrical management
- ✗ M01 Blockwork
- ✗ D58 NOx emissions
- ✗ D11 Reduce timber sent to landfill
- ✗ P03 Reduce C&D waste sent to landfill
- ✗ E21 Leakage pressure reducing valve controller

New GPMs...

- ✓ D72 Pre-refurbishment audit
- ✓ P13 Furniture logistics
- ✓ D75 Reduce workbench waste
- ✓ E28 Secondary window treatments
- ✓ D81 Responsible sourcing
- ✓ E30 Efficient fume cupboards
- ✓ E29 Passive design approach
- ✓ D76 Personal storage
- ✓ D77 Biophilic design
- ✓ P17 Air quality impact assessment
- ✓ D73 Reduce packaging waste
- ✓ D74 Reduce RAF waste
- ✓ P14 Social value actions

New GPMs...

- ✓ D78 Travel Plan
- ✓ D79 Campus wide travel plan
- ✓ D80 Biodiversity
- ✓ P16 Consumables inventory
- ✓ P15 Furniture inventory
- ✓ D83 Total materials with EPD

Postponed GPMs...

- ❑ Storage and disposal of chemicals
- ❑ Process water production
- ❑ Surface discharge systems

New category: Ecology!

Biodiversity

Criteria

Either a new space for biodiversity is provided in line with the scale of the project or improvements are made to existing green spaces. These can be on any tenant external space including roof or entrance space, balconies, outside breakout areas or surrounding green areas. A minimum of 1 habitat feature and 1 biodiversity enhancement are included from the list below:

1 +	Intensive green roof	Habitat features	Please choose one or more of the habitat features to include in the fit-out.
	Extensive brown roof		
	Green wall/hedging		
	Planters		
	Mulched planting beds		
1	Wild pond	Biodiversity enhancements	Please choose one or more of the biodiversity enhancements to include in the fit-out.
	Standing water		
	Bird nest/box		
	Bat roost/box		
	Bug box		
	Dead wood/log piles		
	Brown landscape: bare rock/gravels/sub-soil		
	Nest cameras linked to monitors in public rest areas		

Scoping

This measure applies if there is tenant core/external space (including existing green space).

Assessment

At design stage: a space for biodiversity has been put into the design plans, this can include balcony, roof or external area and the minimum criteria requested for each is included.

At handover stage: carry out a site visit to confirm the design specifications have been met and maintenance procedures have been considered, with no clear safety or access issues.

At occupancy stage: carry out a site visit to confirm the design specifications have been met and maintenance procedures have been adhered to and the area has not been changed negatively.

Fit-out benchmark & assessment tool

Ecology

Issue

D80

ID

103

Rank

SKA Higher Education

Version 1.0 2016

If you would like to comment on this measure please email ska@rics.org

© RICS 2016

Biodiversity (continued)

Rationale

Life on earth is reliant on ecosystem services and biodiversity. It provides materials, pollination, and carbon storage and provides essentials such as food, water, minerals and materials for human consumption. Biodiversity has decreased by 50% in the past 40 years. It can be easy to separate the urban environment and essentially give this space up without consideration of biodiversity but we are living in a time where we need to make small steps everywhere to improve biodiversity.

One area of concern is around habitat fragmentation and how cities have isolated green spaces either side of them. Making small improvements to our buildings can act as stepping stones and corridors for this wildlife to join up and improve overall biodiversity in the surrounding green areas. Studies have shown the wellbeing benefits of having a green space/stimulating view/outside break out area, and as such promoting the use of a green space where possible will enhance biodiversity and in turn improve aesthetics for staff. A further advantage of adding in a biodiversity measure is to add biodiversity to the agenda of a refurbishment. It has the potential to feed into campus wide strategies, engagement and also to be rewarded for having a positive environmental impact in an area that may have otherwise been neglected.

Guidance

Step 1: identify safety, maintenance and access constraints.

Step 2: identify what habitat features and enhancements should be considered*.

Step 3: align plans with higher education biodiversity action plan, if not applicable then reference the local council or city biodiversity action plans.

Step 4: design green space in accordance with the above with a minimum of 1 habitat feature and 1 biodiversity enhancement introduced.

*A biodiversity checklist tool will be available on the SKA assessor's web page to assist.

In the instance that a protected species has been recorded on site, it is a legal requirement that a professional ecologist must be appointed to undertake a site survey.

WWF Living Planet Report, 2014.

52 Tips for Biodiversity, EC.

Biodiversity scenarios: projections of 21st century change in biodiversity and associated ecosystem services, SCBD CBD Technical Series No. 50.

Psychological health and mental well-being, Forest Research.

On Green Roofs and Brown Roofs, Living roofs.

Designing for Biodiversity: A technical guide for new and existing buildings, RIBA Publications.

Fit-out benchmark & assessment tool

Ecology

Issue

D80

ID

103

Rank

SKA Higher Education

Version 1.0 2016

If you would like to comment on this measure please email ska@rics.org

© RICS 2016

Evolution of SKA principles

The scheme's general ranking moves...



Is it ok to use the Offices or Retail schemes instead of HE?

- ▶ Using the scheme to benchmark spaces in the same industry.
- ▶ Latest benchmarks for each issue
- ▶ Use and ownership is different; HE scheme includes campus wide issues.
- ▶ Unless it is a purely office based facility for a staff admin use; only use the HE scheme.

- Align University strategy with SKA principles and standards
- Incorporation in standard details, specifications and project briefs
- Up-skilling of in-house/framework teams
- Update the procurement process to reflect more circular solutions
- Collaboration with Finance, HR, Facilities, Sustainability & Design teams

We encourage...

- The various sector task groups to share a point of contact with the SKA TC chair for on-going feedback and communication at key stages.
- The sharing of knowledge between institutions around achieving high SKA ratings and incentivising good industry practice.
- Taking part in future workshops to evolve the criteria and measures to ensure they reflect the latest good practice and benchmarks.

Sources & information

- ▶ Update to HE is anticipated after a year to adjust to use and feedback as it starts getting used.
- ▶ Retail being updated, starting in 2016 and anticipated to launch end of 2017.
- ▶ Offices anticipated to be updated, starting in 2017.
- ▶ New schemes in discussion: Hotels and accommodation, International Pilots.

SKA rating product compliance label

SKArating®

Products are independently assessed for their compliance.

Manufacturers and suppliers can obtain the SKA rating Product Compliant Label if the product is found to be compliant.



SKA assessors can identify products which meet individual SKA rating criteria.

The SKA rating Compliant Label List is hosted on the RICS website.

More information about SKA rating



- Follow SKA on Twitter: @SkaRating
- Join the SKA rating LinkedIn Group
- Navigate to the SKA webpage: rics.org/ska
- Read the SKA rating section on www.isurv.com
- Read the RICS Building Surveying Journal.

SKA Rating for Higher Education Assessor Course

Web class Online

SKA Foundation Course

e-Learning course

Any questions?

“(Sustainable development is)...development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”

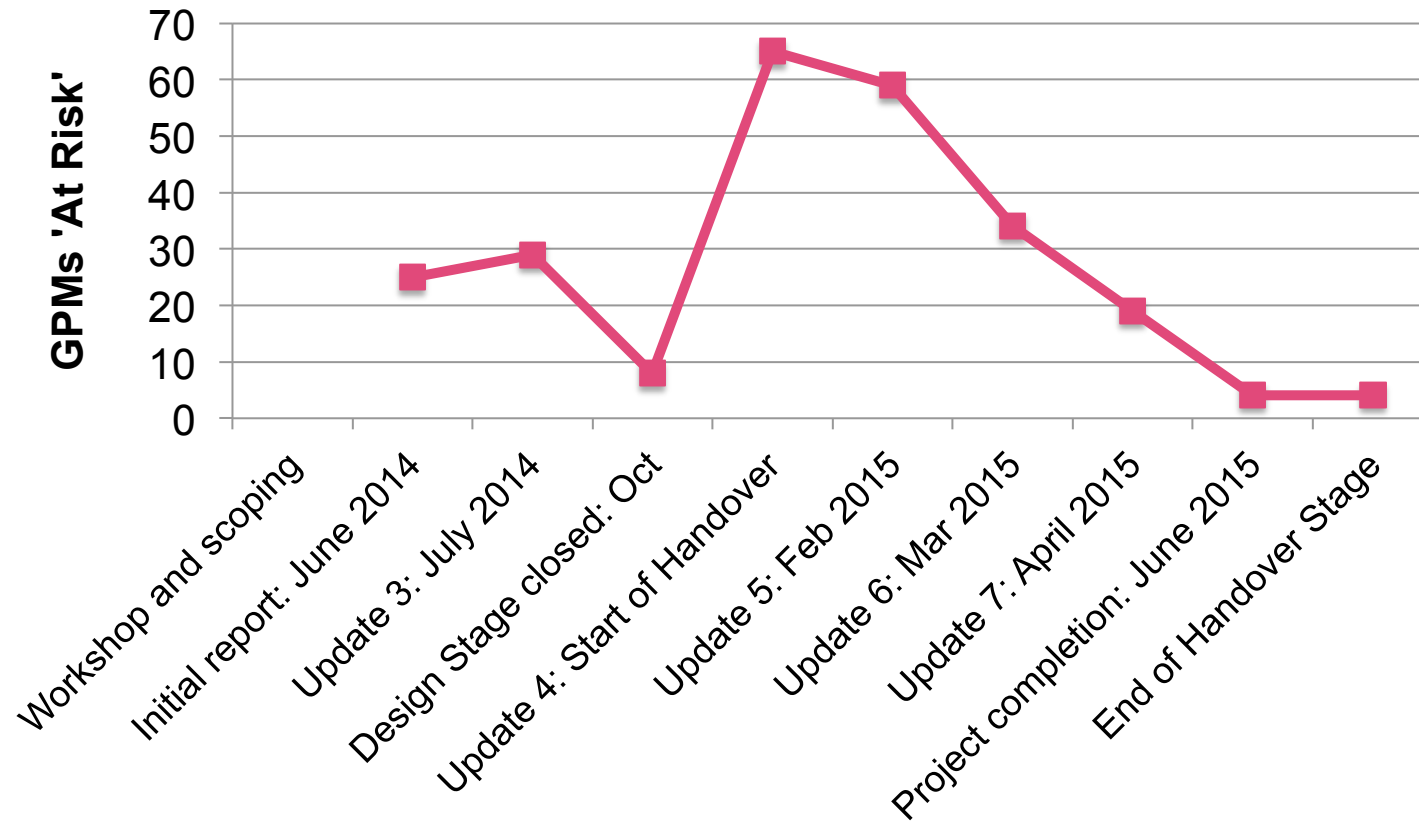
The Brundtland Commission, *Our Common Future*, 1987



Photos by Ana Escobar

Workshop around Focus issues

Reporting and monitoring 'at risk' measures throughout



UCL perspective on use of SKA for Higher Education

Bio

Evan Landy, EHS (Environment) Officer

- Jan' 15 – UCL, Sustainable Construction & Ska lead
- Interest: Sustainability, Biodiversity, Wellbeing

Key takeaway message from me today:

We want sustainability embedded in everything we do for reasons I hope become clear throughout this slides for environmental, financial and social reasons

Overview

- UCL & Ska
- Highlights of using Ska to date
- Ska HE:
 - Consumables
 - Biodiversity
 - The panel will cover other areas

UCL

Founded in 1826

World class teaching and research

Listed buildings & an old estate

Undertaking £1 billion transformation programme over 10 years

Maintaining a sustainable estate is one of 5 key enablers for UCL's long term strategy – we do not want to do this all again in 10 years, 20 years and 30 years time.

Ska

- Whilst we have a small number of new building projects, we have a far larger number of on-going fit-out works and a huge number of minor works and uplift programmes to improve facilities around our estate.
- Maintaining a sustainability is one of 6 key enablers for UCL's long term strategy and so it was clear we had to do something to ensure this construction work was done with this in mind. BREEAM as a planning requirement takes care of our large flagship projects but what of everything else? That's where Ska has come in.

UCL

2015/16:

- Framed 13 fit-out projects using Ska (Office & Retail)
- We also extrapolate individual Ska measures into minor projects and uplift programmes e.g. to comply with lighting or material criteria
- We want to ensure the many 100's of projects over the next 10 years have sustainability embedded (not just the big new builds!)

Quotes from Ska fit-out projects

The space has
been transformed
into a bright,
contemporary and
pleasant
laboratory
environment

I feel way
more
productive in
this space

Nicely planned out
spaces, quieter
which is important
for staff and student
concentration and
useful break out
spaces

Ska HE

- UCL have fed into the development of Ska HE and have been able to feedback our experience of using Ska offices and retail to help steer the scheme to being more tailored to an HE space.
- Specific HE Functions
- Campus Wide links between projects

Quotes from our consultation on a sustainable university

Car free city

Took into account the measures that reduced CO2e in a bigger way and tried to get the community to understand the importance of their behaviour which may be applied in their life outside from UCL

We would like to see walking promoted, roof gardens and better cycle facilities

Lighting and air conditioning is poor

What about recycling?

UCL shouldn't expect us to change behaviours if they don't [change theirs]

Solar panels and roof gardens are really pretty and a very visible way of advertising a green university

Community driven activities

Repeated Themes:
Engagement
Community
Visibility

This affects quality

Biodiversity

- Overwhelmingly feedback has shown people wanted to see visible sustainability initiatives, such as more greenery
- Outside of designing in green roofs (Planning requirement) what can we do?
- Now Ska has a biodiversity measure we want to encourage fit-outs to consider planting and green enhancements to improve the aesthetics of the campus and encourage biodiversity on site

Biodiversity

- Why is this important?
- If we take our consultation as a representation of our staff and students, 60% of them want to see our campus more green, that's 21,000 students
- It will result in a more pleasant place to work, study and enjoy
- Can help to improve student/staff satisfaction
- Boost biodiversity – we all live in urban environments (90% of us in the UK, now!), we need to bring wildlife to us for wellbeing, quality and biodiversity reasons

Consumables

- Consumables form a huge proportion of operational costs at universities
- During fit-out projects we find items are frequently chucked out at the start of projects and new items bought in at the end (double cost)
- A new Ska HE measure (Consumables Inventory) intends to document what consumables can be retained, reused, or shared with other departments prior to construction to encourage campus wide thinking into sustainability of resources.
- Case Study: A chemistry department inventory of chemicals has seen the department save £90,000 through avoiding buying surplus chemicals, only to remove them at a later date. The measure encourages sustainable thinking:

Consumables

- Benefits:

This measure can get departments thinking about optimisation of resources – it can lead to better communication between departments and the idea is that this can help further optimise space and resources.

We can look to further improve this by centralising facilities such as shared freezer stores and a general drive towards joined up sustainable thinking

These two measures, whilst perhaps not the most directly impactful of the Ska measures have the potential to improve the quality of spaces and improve the community and sustainable feel throughout the university

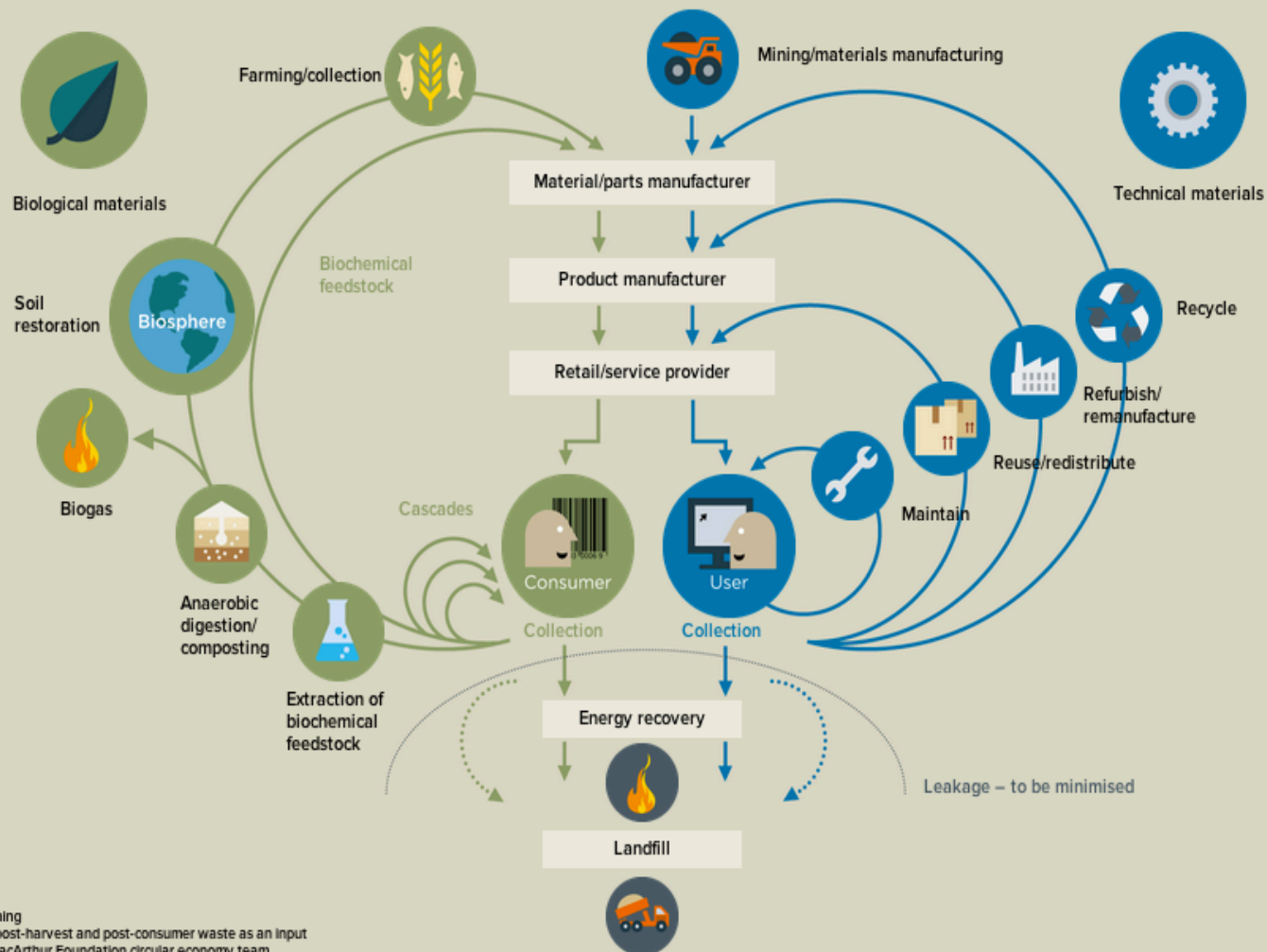
“UCL has adopted RICS Ska in order to promote good practice in sustainability across its portfolio of projects. As a result, it has delivered significant savings as well as ensured that the Institution is acting responsibly. It has also supported the upskilling of UCL project staff - enabling them to get a better understanding of our sustainability goals.”

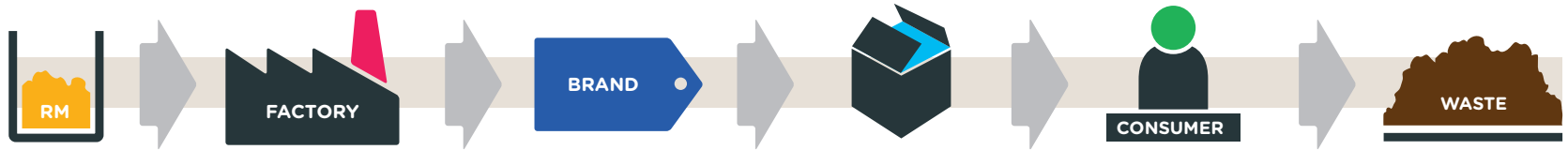
Richard Jackson
Director,
Sustainability
Safety & Sustainability
UCL

What is a **circular economy**?

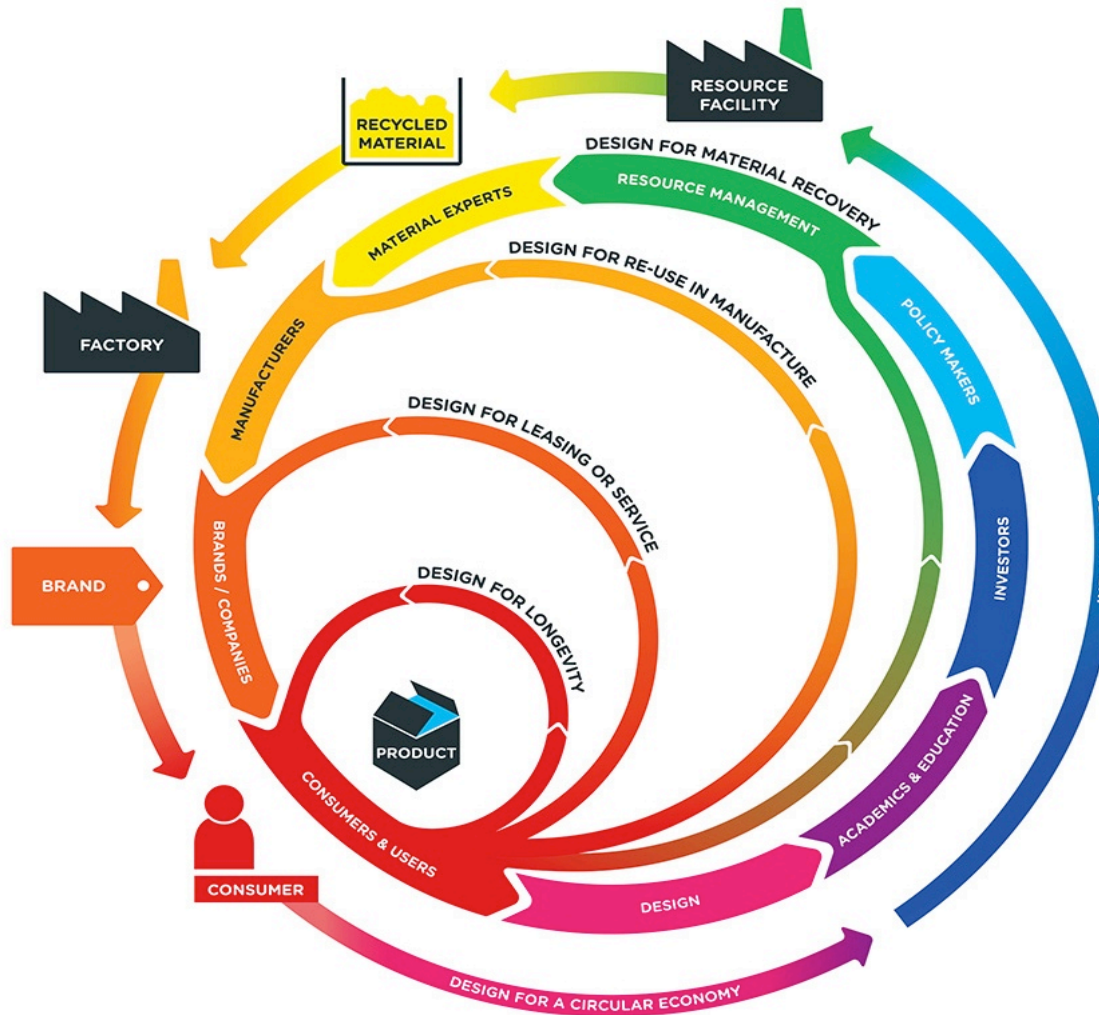
What does Cradle to Cradle mean?

THE CIRCULAR ECONOMY AN INDUSTRIAL SYSTEM THAT IS RESTORATIVE BY DESIGN



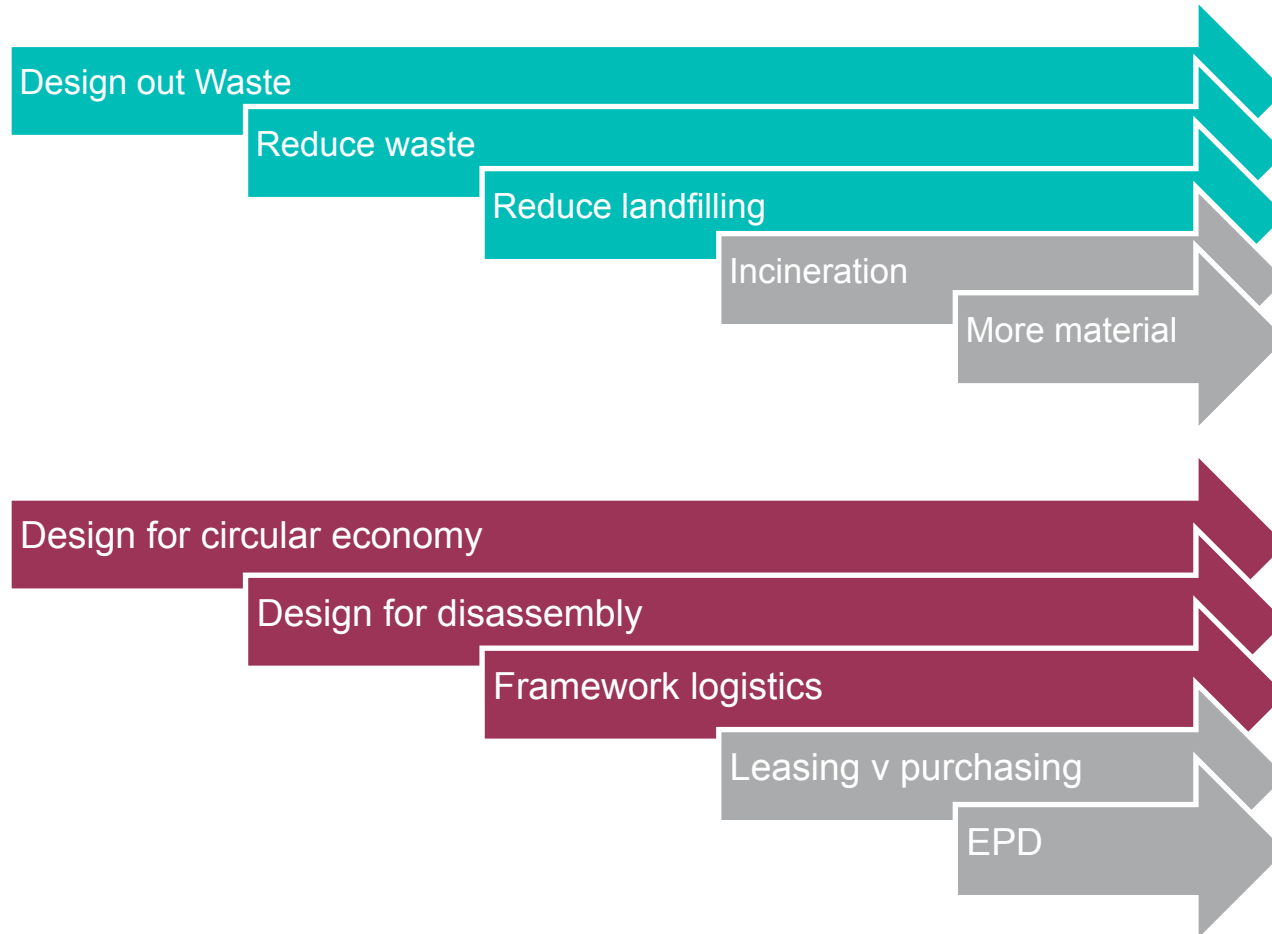


The circular economy



Evolution of SKA principles

Assessment stages and time critical actions...



Evolution of SKA principles

Assessment stages and time critical actions...

Design Stage

D72 Pre-refurbishment audit
D69 Soft landings: design workshops
D60 Design out Waste
All waste measures
P16 Consumables inventory
P15 Furniture inventory
D82 Good laboratory design
E29 Passive design approach
D66 Energy modeling
D04 Improvement in daylighting
P17 Air quality impact assessment
D57 Refrigerant leak prevention

Handover Stage

D09 RMP
All metering & monitoring installations.
Meter readings at start of Occupancy.
P13 Furniture storage logistics
P14 Social value actions
D70 & D71 Soft landings Travel Plans

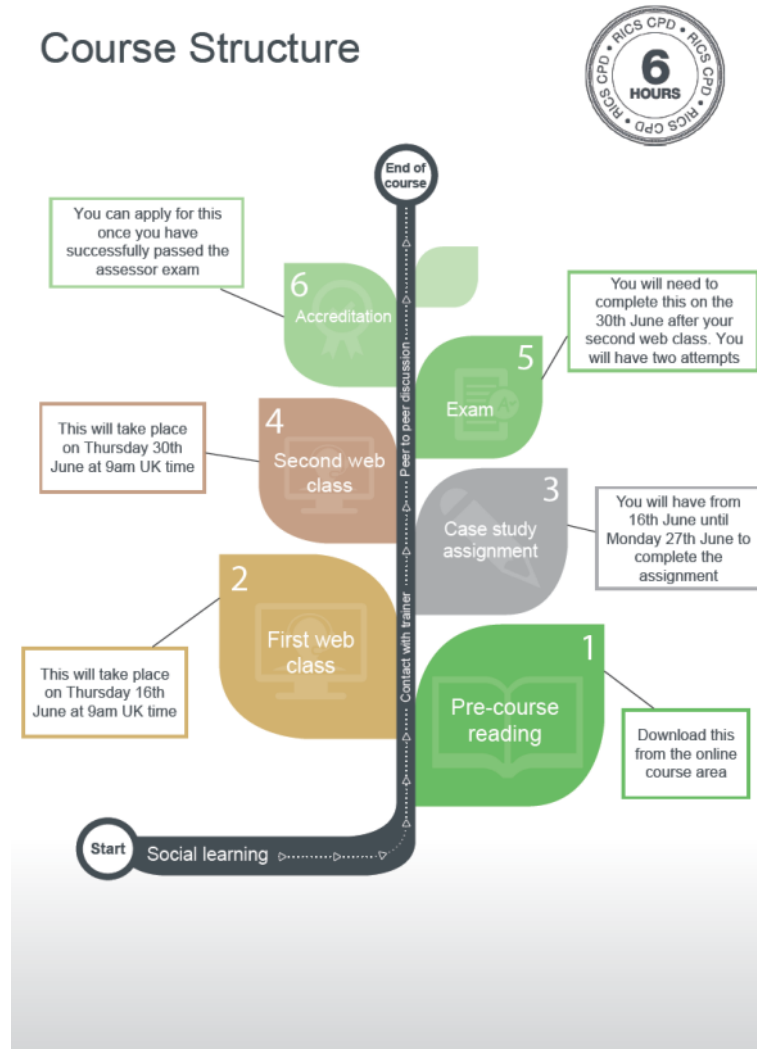
Occupancy Stage

P10 Small power in use
P11 Lighting in Use
P08 water in use
P05 Total waste in use
P06 Increased recycling in use

Scheme differences & choice

Assessor Qualification Process

Course Structure



Questions and answers

Thank you for attending!



Please visit academy.rics.org to find out what else RICS Training can offer you