

# PRODUCING A 4\* RESEARCH ENVIRONMENT STATEMENT

(A UK PERSPECTIVE)

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# **About me**



2016-2021, Associate Director for Research Impact and Knowledge Exchange, AMBS



Supervised the submission of ten impact cases for REF2021 and contributed to school environment statement



AMBS strengthens its position as a leading business school for research

Thursday, May 12, 2022 Research, School

Alliance Manchester Business School is placed third in the UK for research power(1) – which measures the quality and scale of research impact – in the UK government's Research Excellence Framework (REF) 2021.

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### **UK REF 2021 Results: University Rankings by Environment Power \***

		No.								GPA*
Rank	Institution	UoAs	FTE	4*	3*	2*	1*	GPA	Power	Power
1	University of Oxford	31	3,405	87	12	1	0	3.87	1000	3870
2	UCL	32	3,177	87	12	1	0	3.86	931	3594
3	University of Cambridge	30	2,847	81	18	1	0	3.81	823	3136
4	University of Edinburgh	28	2,563	82	18	0	0	3.82	744	2842
5	University of Manchester	31	2,124	82	18	1	0	3.81	615	2343
6	King's College London	25	1,883	76	22	1	0	3.75	536	2010
7	Imperial College London	11	1,550	94	6	0	0	3.94	464	1828
8	University of Leeds	28	1,686	63	36	1	0	3.62	464	1680
9	University of Nottingham	29	1,718	59	36	4	0	3.55	464	1647
10	University of Bristol	28	1,494	68	31	1	0	3.67	417	1530

<sup>\*</sup> Total universities=129. Power=Research Power, representing institutional scale.

Panel 9 - Business & Economics

Sector-wide / university	Quality profile & sub-profiles		Percent neet the		_		3* •	□ 2* □	0 1*	_u/c	No. of eligible
		<b>4</b> *	3*	2*	1*	u/c		Ī			staff
Sector-wide	Overall	32	38	19	5	6					659
	Outputs	26	37	22	6	9					
	Impact	36	51	9	4	0					
	Environment	55	31	14	0	0					
The Chinese	Overall	40	37	17	3	3					103
University of Hong Kong	Outputs	27	40	24	5	4					
g	Impact	75	25	0	0	0					
	Environment	67	33	0	0	0					

UoA 20 - accountancy

Sector-wide / university	Quality profile & sub-profiles			age judg standa	_		4*	3* •	□ 2* □	0 1*	u/c	No. of eligible
		<b>4</b> *	<b>3</b> *	2*	l*	u/c						staff
Sector-wide	Overall	36	37	15	2	10						105
	Outputs	27	35	21	3	14						
	Impact	40	60	0	0	0						
	Environment	71	29	0	0	0						
The Chinese University of Hong	Overall	47	24	22	3	4						19
Kong	Outputs	24	35	31	4	6						
arong .	Impact	100	0	0	0	0						
	Environment	100	0	0	0	0						

UoA 21 - economics and finance

Sector-wide / university	Quality profile & sub-profiles		Percenta neet the 3*		_	u/c	4* =	3*	2*     	01*	_u/c	No. of eligible staff
Sector-wide	Overall	28	36	22	5	9						220
	Outputs Impact Environment	23 37 43	35 47 28	23 11 29	6 5 0	13 0 0 0						
The Chinese	Overall	48	30	15	2	5						41
University of Hong Kong	Outputs Impact Environment	26 100 100	42 0 0	22 0 0	3 0 0	7 <b>0 0 0</b>						

UoA 22 - business

Sector-wide / university	Quality profile & sub-profiles			age jud standa	_		■ 4* ■	3*	= 2*	0 1*	_u/c	No. of eligible
		<b>4</b> *	3*	2*	1*	u/c						staff
Sector-wide	Overall	31	41	19	6	3						295
	Outputs	29	37	22	7	5						
	Impact	30	53	13	4	0						
	Environment	43	43	14	0	0						
The Chinese	Overall	26	53	16	4	1						43
University of Hong Kong	Outputs	30	40	23	6	1						
itong	Impact	33	67	0	0	0						
	Environment	0	100	0	0	0						

## **DEFINITION OF ENVIRONMENT, RAE 2026**

For the purpose of the RAE 2026, research environment refers to the strategy, resources (e.g. grants obtained, people) and infrastructure that support research giving rise to collaborations, esteem and contributions to the discipline or research base.

Weighting of RAE elements								
2020 2026								
Outputs	70	65						
Impact	15	20						
Environment	15	15						

## DEFINITION OF ENVIRONMENT, RAE 2026

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Word Cloud from UK's top-ranked business school environment statement, **REF2021** 

#### DEFINITION OF ENVIRONMENT

What does the department do that enables its researchers to make significant contributions to the discipline and generate significant impact?



Word Cloud from UK's top-ranked business school environment statement, **REF2021** 

### REQUIREMENTS OF EO STATEMENTS, RAE 2026

One UoA-level environment overview statement describing:

- > The submitting unit's research and impact strategy(ies);
- > research integrity, research ethics and research culture;
- > its support for research staff and students;
- > its research income, infrastructure and facilities;
- > its research collaborations, esteem and wider contributions to the discipline or research base, etc.

of the administrative units containing the staff in the submitting UoA during the assessment period, i.e. from 1 October 2019 to 30 September 2025

# ASSESSMENT CRITERIA: VITALITY AND SUSTAINABILITY

- Panels will assess the research environment in terms of its "vitality and sustainability", including its contribution to the "vitality and sustainability" of the wider discipline or research base.
- Panels may decide on whether to assess each environment submission as a whole, or to attach weighting to individual aspects within the environment element in their assessment.



Vitality: The extent to which a unit supports a thriving and inclusive research culture for all staff and research students, that is based on a clearly articulated strategy for research and enabling its impact, is engaged with the local and international research and user communities and can attract excellent postgrads and postdocs.

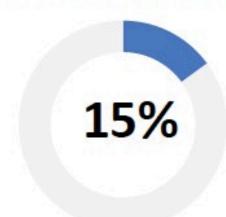


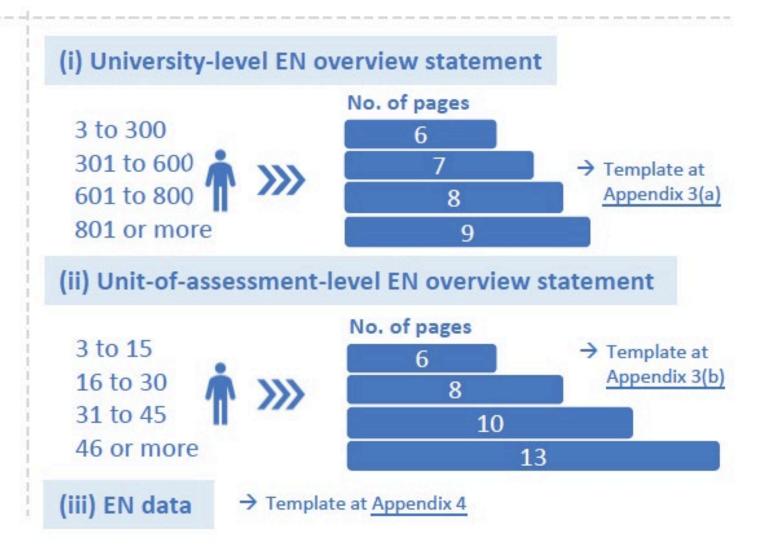
Sustainability: The extent to which the research environment ensures the future health, diversity, wellbeing and wider contribution of the unit and the discipline(s), including investment in people and in infrastructure.

## **DEFINITIONS OF QUALITY**

4 star (4*):	An environment that is conducive to producing research of world-leading quality, in terms of its vitality and sustainability.
3 star (3*):	An environment that is conducive to producing research of internationally excellent quality, in terms of its vitality and sustainability.
2 star (2*):	An environment that is conducive to producing research of internationally recognised quality, in terms of its vitality and sustainability.
1 star (1*):	An environment that is conducive to producing research of limited quality, in terms of its vitality and sustainability.
Unclassified (u/c)	An environment that is not conducive to producing research of 1 star quality; or nil submission.









(30 MINUTES, IN BREAKOUT GROUPS)

# EVALUATING ENVIRONMENT STATEMENTS

Using the two provided environment statements from the UK's REF2021, in your breakout groups:

#### Task (30 minutes)

- Discuss the strengths and weaknesses of each statement
- 2. Decide as a group: Which is 3\* and which is 4\*?

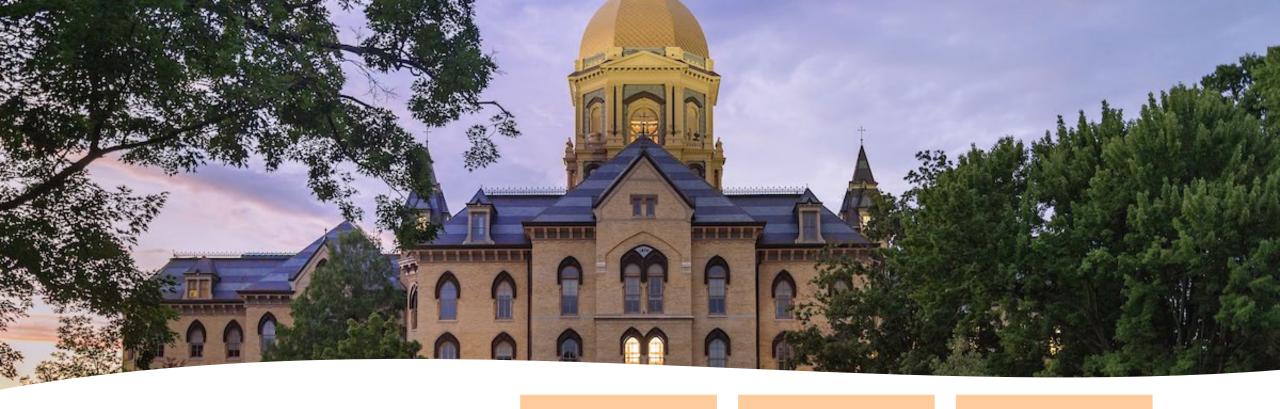


# **EVALUATING ENVIRONMENT STATEMENTS**

Discussion and conclusions from the exercise:







ELEMENTS OF A 4\* ENVIRONMENT STATEMENT Numerical quality indicators

Impact & engagement focus

Narrative

Disciplinary focus

**Esteem** indicators

**Halo effects** 

### QUANTITATIVE INDICATORS OF QUALITY

- > Pinar & Unlu (2020) analyzed all EO statements from UK REF2014
- Size (FTE staff), which is a proxy of the level of collaboration, infrastructure, and facilities, is the biggest predictor of GPA
- > But 'size effect' disappears when using raw totals for research income and PGRs
- So, focus on the benefits of size (collaborations, facilities, resources) and on the benefits of income (i.e., how it is used to enable contributions to the discipline and enable impact)

# Determinants of EO GPA in Business & Management, Ranked

Rank	Determinant
1	FTE staff submitted (0.612***)
2	Panel member in REF (0.272***)
3	Russel group member (0.183*)
4	Income per FTE (0.145***)
5	PGRs per FTE (0.095*)

# HOW (NOT) TO WRITE AN ENVIRONMENT STATEMENT

- Inglis et al (2024) used topic modelling to analyze all 1,888 unit-level environment statements in REF2021
- How the statements were written contributed substantially to the perceived quality of a unit's research environment
- > They uncovered eight topics that predicted significant proportion (59%) of variation in environment scores
- The findings support anecdotal ideas concerning how to write a good environment statement

Topic	Beta
Immature Research Environment	-0.438***
Exemplification of Strategy and	
Processes	0.117***
Early Career Researcher (ECR)	
Development	-0.112***
Industry Partners and Funding	0.068***
Staff Ways of Working	-0.057***
REF-Focused Research Strategy	-0.054***
Internal Structure of Research Units	-0.006
Career Development and EDI	-0.023



## **POSITIVE PREDICTORS**

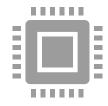
Differs across
disciplines, more
important in medicine &
physical sciences



# **Exemplification of strategy and processes**

Liberal use of explicit examples of the research strategies being described

E.g., To evidence civic engagement strategy, "The Pentland Centre for Sustainable Business was launched with an initial £500k five-year grant from The Rubin Foundation ... [and] organises company-based events bringing non-academics ... into dialogue with academics."



# Industry partners & funding

Devoting considerable space to discussing industrial partnerships and research funding

E.g., for their EPSRC Centre for Doctoral Training (STOR-i), LUMS listed >£1M in industry & government funding involving Rolls-Royce, Morgan Stanley, and others.



#### **Discipline-specific issues**

Emphasizing contributions to the discipline and using language and issues from the discipline.

E.g., LUMS research strengths for interdisciplinary research centres described in terms of disciplinary grand challenges (economic growth, productivity and innovation, climate change and sustainability, data & digital transformation)



# **NEGATIVE PREDICTORS**





Lower scoring units discussed extensively how they were trying to encourage or support routine research activities

E.g., Low scoring units stating that staff are encouraged to attend conferences and are allocated dedicated research time; high scoring units take this for granted.



# **ECR development** & EDI

Support and training for early career researchers and steps to address equality, diversity and inclusion in research.

A little discussion helps (top units=13-14% of the statement) but too much emphasis was associated with low GPA.



# Staff ways of working

Text focusses heavily on descriptions of staff working methods,

E.g., Detailed discussions of research leave, workloads, etc.



# REF focused research strategy

Using REF terminology to describe the research environment.

E.g., describing internal structures in terms of UoAs or 'units' rather than departments, centres or institutes.

#### DIFFERENCES BETWEEN DISCIPLINES

#### Predictors of environment GPA, by Beta

#### All units of assessment

#### **Business & Management**

Topic	Beta
Immature Research Environment	-0.438***
Exemplification of Strategy and Processes	0.117***
Early Career Researcher (ECR) Development	-0.112***
Industry Partners and Funding	0.068***
Staff Ways of Working	-0.057***
REF-Focused Research Strategy	-0.054***
Internal Structure of Research Units	-0.006
Career Development and EDI	-0.023

Topic	Beta
Immature Research Environment	-0.496***
Industry Partners and Funding	0.336***
Early Career Researcher (ECR)	
Development	-0.219***
Business & Management	0.120***
Exemplification of Strategy and	
Process	0.102
REF-Focused Research Strategy	-0.083
Internal Structure of Research Units	0.013
Staff Ways of Working	0.073
Career Development and EDI	0.010

#### NARRATIVE

Higher scoring units tend to have an over-arching narrative that is:



## **Distinctive**

Not merely describing the norm for departments in the discipline but emphasizing the distinguishing features that have enabled influences on the discipline and practice.



### **Authentic**

Credible and true to the department's/school's history and known achievements



### Mission-led

The mission is usually linked to research contributions to the discipline and/or impact and engagement priorities.

E.g.,

<u>Cardiff Business School</u>'s strategy of Public Value <u>Imperial College Business School</u>'s focus on interdisciplinarity <u>Alliance Manchester Business School</u>'s sense of place

# CONCLUSIONS AND PRACTICAL TIPS



#### CONCLUSIONS

- > The environment statement is 15% of the assessment and is controllable
  - > You cannot (now) control outputs and impact but you can craft the statement
  - > The language and narrative you choose will shape your school's score
- > The differences between 3\* and 4\* statements are obvious
  - > And so, you can observe them and learn the 'rules'
  - > Read and contrast (further) example statements from lower and higher scoring units
- > Crafting the statement is a creative act but probably not a solo one
  - > Writing a good statement takes many drafts and will involve several people
  - > But, like any good piece of writing, the final version must speak with one voice
  - > Avoid the two dangers of buck-passing and writing by committee

#### MAIN PRACTICAL TIPS

- 1. Develop a distinctive, authentic, mission-led narrative
- 2. Describe contributions to the discipline as much as possible and work back to describe the strategy, resources and infrastructure that enabled these
  - Write the statement outside-in, not inside-out
- 3. Illustrate your research strategy by giving as many concrete examples as possible
  - Interdisciplinary work? Give specific examples of interdisciplinary contributions, funding successes, or impact work.
  - Impact focus? Give examples of beneficiaries and how they benefited (link to impact cases) and what support enabled this activity.
  - Pump-priming? Give examples of people who received funding, what they did with it, and what this led to.
- Describe research funding and industry/practice/policy partnerships as much as possible
  - Use detail to go beyond numbers in grant data to show how income was used
  - Describe industry and practice collaborations

#### RESOURCES

- Suidance notes on the exercise
  - > https://www.ugc.edu.hk/eng/ugc/activity/research/rae/2026/guidance\_notes.html
- > Example statements
  - https://2021.ref.ac.uk/ (REF2021, 1,888 impact cases)
- > Further reading on what makes a good environment statement
  - > Pinar, M & Unlu, E. (2020) Determinants of quality of research environment: An assessment of the environment submissions in the UK's Research Excellence Framework in 2014, *Research Evaluation*, 29, 3, 231–244, <a href="https://doi.org/10.1093/reseval/rvaa003">https://doi.org/10.1093/reseval/rvaa003</a>
  - > Inglis, M., Gadd, E., Stokoe, E. (2024). What is a high-quality research environment? Evidence from the UK's research excellence framework, *Research Evaluation*, <a href="https://doi.org/10.1093/reseval/rvae010">https://doi.org/10.1093/reseval/rvae010</a>
  - Blackburn, R., Dibb, S., & Tonks, I. (2024). Business and management studies in the United Kingdom's 2021 research excellence framework: Implications for research quality assessment. British Journal of Management, 35(1), 434-448, <a href="https://doi.org/10.1111/1467-8551.12721">https://doi.org/10.1111/1467-8551.12721</a>



# PRODUCING A 4\* RESEARCH ENVIRONMENT STATEMENT

## **THANK YOU!**

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