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#### Signed

Date 21 October 2025

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This report offers a summary of results from a Churchill Fellowship project. Funding was awarded through a 2022 AV Jennings Churchill Fellowship award to connect global to connect global efforts for climate action and literacy across the architecture profession.

Travel was conducted between August and September, 2023.

#### To cite this report:

Brogden, Liz. (2025). Architects in a Changing Climate: Collective Action, Education Reform and Cultural Transformation (Churchill Fellowship Report). Winston Churchill Trust. Brisbane, Australia.

#### **Acknowledgements**

I extend my heartfelt thanks to the Churchill Trust, Queensland, as well as to AV Jennings for the sponsorship provided. The work has taken many twists and turns, and I appreciate the patience afforded as I worked to untangle the complex knot of problems facing the Australian architectural profession. Thank you also to the School of Architecture, Design and Planning at the University of Queensland for the support in completing the travel and research required for this project.

Thank you to the Association of Architecture Schools of Australasia (AASA) and the Climate Action Working Group, through which many collaborative research activities have emerged. Along with the Australian Institute of Architects' endorsement, two national surveys on climate action in education and practice have been completed through this project, providing insights that have been foundational to this Churchill Fellowship research. I extend special thanks to the first academics in Australia to respond to declarations of a climate emergency by forming this AASA working group: Chris Knapp, Philip Oldfield, Naomi Stead, and Dagmar Reinhardt, as well as Yu Kao, Naima Iftikhar, Kavita Gonsalves, Charlotte Kessler, and Gina Engelhardt for their contributions to the work since.

On returning to Brisbane, I convened a workshop with a trusted group of peers. To the 'Brisbane crew' — Gina Engelhardt, Carlos Estrada, Kavita Gonsalves, Hannah Holmen, Markos Hughes, Clare Kennedy, Hudson Smith, Anna Svensdotter, Neil Taylor, Sheona Thomson, and Anna Tweeddale — thank you for the opportunity to share initial findings and discuss this work.

I also extend my thanks to Scott McAulay and Emma Geoghegan for generously answering follow-up questions about gaps in the climate action timeline I was attempting to construct. A detailed understanding of the timing of key events and initiatives enabled me to make the connections needed to draw findings. As the research findings came together, I also have Rachael Bernstone to thank for expert advice on communication and, as a 2003 Churchill Fellow, sage wisdom about dissemination strategies. I also thank Lucy Humphrey and Anna Svensdotter for serving as sounding boards and for their interest in ongoing discussion and testing of ideas.

My deepest gratitude goes to my husband, Ryan, with whom I am building a family and future that makes everything worthwhile. This Fellowship would not have been possible without his unwavering support and care for our daughters while I was travelling. Finally, to Asher and Rose, thank you for sharing your mum with the world while I was away. All that I do is for you in the hope that you and your children, and your children's children, can re-learn how to live in harmony with a changing climate.

#### Keywords

Climate action
Collective action
Youth activism
Climate literacy
Architecture education
Industry training
Cross-sectoral collaboration
Professional bodies
Public funding
Education reform
Education and training frameworks
Just transitions

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# **Executive Summary**

This Churchill Fellowship investigates how international climate action has been translated into institutional change within architectural practice and education, drawing on insights from 36 interviews conducted across the United Kingdom and Europe in late 2023. The research shows that sustained progress in climate action requires both collective action and reforms to architectural education and training.

Importantly, the research also shows that to embed emerging forms of climate literacy into practice, transformative change to the profession itself is needed. This change is being driven by the next generation of architects who are calling for greater inclusivity, diversity, and authentic engagement with the pressing issues of our time.

#### **Background**

As the global climate action movement gathered momentum in late 2018, a portion of the architectural profession mobilised to form committees and climate action groups that bridged academia, practice, and professional bodies. Through these cross-cutting initiatives, an aligned response to climate change was forged, and alliances were formed between previously disconnected parts of the profession.

Through interviews across five European countries with architects, academics, students, and members of both collective action groups and professional bodies, a compelling story about a once-in-ageneration uprising emerged.

#### **Findings**

The narrative begins with the release of the IPCC Special Report on Global Warming of 1.5°C in late 2018, which helped ignite a global climate movement that quickly took hold in the architectural profession. Early participation in climate protests—championed mainly by architecture graduates and students—was consolidated through collective action as an expanding network of established architects, academics, graduates, and students responded to the climate crisis through education and training reform.

As awareness grew of the interconnected nature of climate and (in)justice issues, a second youth-led movement emerged from 2021, in which emerging architects began protesting structural barriers to change and cultural issues in the profession. The story culminates in a generational cultural shift that was exemplified in the successful 2022 campaign to elect Muyiwa Oki as the Royal Institute of British Architects' (RIBA) first worker, first Black, and youngest-ever president, at age 31.

The five-year account of climate action outlined in this report draws to a close in September 2023, as the UK Architects Registration Board (ARB) confirmed the full extent of demand for cultural transformation. In the same month that Oki commenced his presidential term, the ARB endorsed the most significant changes to architecture education and training in 50 years, approving a more inclusive framework that supports diversity in the profession and opens the way for strengthened alignment between grassroots advocacy and institutional reform.

#### **Objectives**

Through this research, key events and initiatives have been mapped as a chronological timeline of climate action, demonstrating how initial calls for *climate literacy* in architecture evolved into a *just transitions* movement, alongside growing demand for cultural transformation in the profession.

The five-year account detailed in the main body of this report is summarised in a graphic timeline of key events, with accompanying web links, provided in the appendix (see p. 93).

By illustrating the interconnected nature of collective action across architecture education, practice, and professional bodies, Australian architects can gain valuable insights into the barriers and enablers of climate action. However, in mapping these initiatives, the extent to which our national context limits collective action is also revealed.

#### **Conclusions**

Architects in the countries visited benefit from proximity to major cities, extensive transport infrastructure, and larger numbers practising and knowledge-sharing about similar climatic conditions, construction methods, and materials. In contrast, Australian architects are scattered across vast areas and varied climate zones. Observations of international climate action in architecture highlight how the "tyranny of distance" is preventing a comparatively small profession in Australia from establishing a coordinated approach to climate action.

There are excellent examples of climate expertise and advocacy across the Australian architectural profession occurring at national, state, regional, and local levels. However, these initiatives lack the connectedness that is required for basic awareness, let alone collaboration and coordination. Efforts are further fragmented by a federated system of separate state and territory registration boards, each operating within distinct regulatory frameworks and statutory environments. These layers of governance also obscure a comprehensive view of the profession itself.

For these reasons, the recommendations aim to connect climate action across the Australian architectural profession in line with international progress in education and practice. Each is linked to key findings that illustrate how capacity-building across the profession depends on the combined impact of collective action, education reform, and cultural transformation.

## Recommendations

## 1 Connect with climate action initiatives beyond architecture

Australian architects belong to a small profession with approximately 17,500 architects dispersed nationally across a land mass the size of continental Europe. Strengthening place-based connections, and collaboration with allied professions on climate action is essential.

**International Finding 1:** Architects have expanded their focus beyond the profession and engaged with external events and movements to drive climate action.

## 2. Form local communities of practice for our many local climates

Australian architects must address diverse climate risks and resilience challenges through their practice. Knowledge sharing to build local expertise across eight state and territory jurisdictions requires regular in-person events that connect national networks.

**International Finding 2:** Architects built local networks and communities of practice, which generated a sense of agency, community and solidarity through climate action.

## Collect the data needed to lobby for climate action in architecture

Australian architects need nationally coordinated data on education and practice to enable consistent reporting, shared learning and collaboration across states and territories. Local climate and material data is needed to support place-based sustainability.

**International Finding 3:** Architects used data-informed research to advocate for structural and institutional change and to strengthen climate literacy.

## 4 • Co-create new climate change education and training material

Australian architects can play a critical role in addressing climate change with targeted capacity-building. Rather than duplicating efforts, industry bodies, practices and universities need to collaborate to develop climate frameworks and curriculum material.

**International Finding 4:** Architects collaborated to through climate literacy research and to develop resources between different groups and organisations.

95% of practitioners agree that architects should be part of the solution for climate change issues.

Climate Action in Australian Architectural Practice report

When asked to elaborate on the main drivers of sustainable outcomes in their practice, practitioner responses emphasised a desire for communities of practice, cultural change in the profession, and engagement with the broader community.

Climate Action in Australian Architectural Practice report

82% of practitioners feel obstructed by barriers when changing practice in response to climate change.

When asked to elaborate, responses described barriers including a lack of knowledge, perceptions of cost, and systemic barriers at state and national levels.

Climate Action in Australian Architectural Practice report

83% of practitioners are using self education to up-skill about climate change and sustainability issues.

Practitioners want interconnected sources of information and data. There is a strong demand for high quality, accessible CPD across a range of topics.

> Climate Action in Australian Architectural Practice report p. 36 and 54

## **5.** Support curriculum change in architecture schools

Australian architecture academics need strategic support to embed climate literacy across the curriculum. Strong connections between schools and industry bodies will ensure that university education leads into continuing professional development as lifelong learning.

**International Finding 5:** Architecture schools have been given dedicated resourcing and support to keep pace with industry transformations driven by climate change.

## **6.** Reform education to redirect architectural practice

Australian architects need to position architecture education and training in climate literacy as a driver for transformative change in practice. Our NSCA is well positioned to embed climate literacy across the full career span of an architect.

**International Finding 6:** Architects have been protesting the cultural barriers that prevent change in the profession, demanding structural reform to education and practice.

## 7. Lead by example and endorse climate action from the top

Australian architects need leaders and organisations to champion public conversation about climate change and the future of the profession. To sustain action and engagement, leadership from those in positions of influence is essential.

**International Finding 7:** Architects in influential positions, practices, professional bodies, and architecture schools endorsed and joined the climate action movement.

## Celebrate new career paths for architects in a changing climate

Australian architects must uphold professional standards while recognising diverse and evolving roles in contemporary practice. Overly narrow definitions of the profession risk limiting future opportunities for architecture graduates interested in sustainability.

**International Finding 8:** Architects interested in climate action have been moving away from traditional career paths to pursue new specialisations, and role types.

## 9. Build a profession in service to the next generation of architects

Emerging architects need the mentoring and professional guidance that previous generations received. To navigate the challenges of climate change, strong intergenerational connections across the profession are essential to drive transformation in practice.

**International Finding 9:** Architects involved in climate action are burning out from the extra commitment of voluntary initiatives and resistance to change at work.

In 2022, 95% of Australian architecture academics agreed they want to see more teaching about climate change in degrees,

> 64% indicated that they planned to review their curriculum, and 85% agreed that they would benefit from support or resources to help inform possible changes.

> > Climate Literacy and Action in Architecture Education: Australasian Perspectives

91% of practitioners are in favour of policy and regulation change to better support climate action through architectural practice.

Climate Action in Australian Architectural Practice report

93% of practitioners are concerned about climate change and want to see more climate action.

Of the 234 participants who described themselves as directors or partners, 90% agreed that they wanted to see more climate action across the profession.

Climate Action in Australian Architectural Practice report pp. 22 and 35

When asked to describe the role architects should play as part of the solution to climate change, participants described multifaceted and varied roles that require both technical knowledge and people skills.

Climate Action in Australian Architectural Practice report

75% of practitioners selected "practice values and purpose" as the most common driver of sustainable design outcomes in their practice, followed by "protecting future generations" as the second most

Climate Action in Australian Architectural Practice report

# Dissemination and Implementation

International barriers and enablers to climate action outlined in this report reveal opportunities for architects in Australia. However, the findings also highlight structural and capacity challenges that limit the profession's ability to respond effectively to the climate crisis.

Fragmentation across jurisdictions, vast geographic distances, and the small size of the profession have resulted in uneven progress and weak national coordination. Limited access to reliable data and inconsistent regulatory settings have further constrained collective action. In Australia, architects need new knowledge about a variety of changing climate zones, while also building capabilities in low-carbon, disaster-resilient design that supports community resilience.

Meaningful climate action across Australia's eight States and Territories requires coordinated national efforts paired with locally grounded collaboration in smaller geographic regions—where climatic conditions, policy frameworks, and material data align, and where strong, place-based relationships can be built.

## Toward a nationally coordinated strategy through education and training reform

A strategic approach to embedding climate change in architectural education and training is needed: (1) across legislative and policy environments; (2) throughout an architect's entire career; and (3) between architecture schools and practices.

The aim is not for a standardised approach to architecture education. Rather, the objective is to map professional competencies for *environmental practice*, as outlined in the National Standard of Competency for Architects (NSCA), to scaffold capacity-building across the profession. This way, competencies that build climate capabilities can be aligned across university-level education, graduate training for registration, and ongoing education, leading to advanced specialisation pathways.

To achieve this, a nationally coordinated approach is needed between entities such as the Architects Accreditation Council of Australia (the AACA, as the owners of the NSCA), the state and territory Boards of Architects, the Australian Institute of Architects, the Association of Consulting Architects (ACA), and the Association of Architecture Schools of Australasia (AASA).

#### Leveraging the NSCA

To drive climate action and build new capabilities, the Australian architectural profession is positioned to leverage its single competency framework, the National Standard of Competency for Architects (NSCA). A shared set of professional competencies in the NSCA guides all stages of education and training across the entire architectural profession—from university degrees through to the training required for professional registration and continuing professional development.

In 2021, the NSCA introduced new performance criteria for *environmental practice*, one of three professional capability areas. In the new standard, two performance criteria address climate change,<sup>1</sup> four include carbon and life-cycle assessment,<sup>2</sup> and three criteria address environmental sustainability.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> PC12 and PC16

<sup>&</sup>lt;sup>2</sup> PC10, PC31, PC35, and PC45

The NSCA also introduces new performance criteria in the *environmental practice* domain that relate to care for Country, which requires careful consideration and collaboration with Indigenous practitioners and knowledge holders to ensure a mutually reinforcing, justice-oriented approach to sustainability through climate change education.

#### Positioning a business case for collaborative education reform

There is a strong business case for multistakeholder engagement in architecture, for capacity building through education reform. Practitioners are seeking professional learning opportunities that strengthen climate literacy and sustainability competencies. At the same time, architecture schools are integrating the new NSCA performance criteria to retain degree accreditation, while students increasingly expect subjects and studio projects that address climate change.

With support, architecture schools are ideally positioned to serve as local catalyst points for a nationally coordinated capacity-building strategy between industry and higher education. However, schools frequently lack dedicated funding and resources to update curricula in line with industry demand. This gap threatens the profession's ability to align educational outcomes with emerging industry and environmental imperatives.

Further, graduates and practising architects are accessing education products beyond the profession from a range of providers to upskill and maintain their registration status. There is strong demand for high-quality, accessible CPD across a range of climate literacy topics, with a 2022 survey of the Australian architectural profession showing that 83 per cent of practitioners are using self-education to upskill in climate change and sustainability.<sup>4</sup>

Despite these challenges, there is clear potential to build a more connected and climate-responsive profession. Strengthening partnerships between universities, professional bodies, practices, and government agencies will consolidate efforts and increase national impact.

#### Select precedent projects

Through this Churchill Fellowship, several precedent-setting projects were identified in which multiple stakeholders collaborated to build the profession's capacity in response to climate change.

#### **Building Change**

Building Change is a publicly funded curriculum renewal project supported by the Irish government. Through its Human Capital Initiative (HCI), six schools of architecture were awarded €3,900,000 to collaboratively transform architecture education. The project's focus has been on teacher training and design studio modules. See pp. 56-57.

#### **ARCH4CHANGE**

ARCH4CHANGE was co-funded by the European Union through the Erasmus+ program. Academics across five European universities were awarded €300,000 to develop an online curriculum platform designed to integrate climate-emergency thinking into architectural education. The project includes a teaching toolkit for educators. See pp. 55-56, and 58.

#### **ARB Tomorrow's Architects**

The UK Architects Registration Board (ARB) conducted a three-year, staged review of its education and training framework in collaboration with industry stakeholders and the Standing Conference of Schools of Architecture (SCOSA). The review culminated in a three-month open consultation, Tomorrow's Architects, and radical changes to architectural education. See p. 42.

#### **Climate Framework**

The Climate Framework was developed in collaboration with industry partners and academia and is supported by more than 95 organisations nationally. The Royal Institute of British Architects (RIBA) adapted it as a *Climate Literacy Knowledge Schedule* in its education and training framework, *The Way Ahead*. See p. 38-39.

For more examples of international climate action initiatives in architecture, see *Five years of climate action in architecture*, p. 21.

<sup>&</sup>lt;sup>4</sup> Brogden et al. (2023)

## Introduction

Drawing on well-established traditions of passive design, the best architects are already adept at responding to climate. Through careful orientation of building form, placement of thermal mass, and openings that account for temperature range, prevailing winds, and sun paths, well-designed buildings can be remarkably adaptive to normal climatic variations. However, the unpredictability of a changing climate means that these "tried and true" architectural strategies alone are no longer sufficient.

Architects of the future will mitigate climate change by developing expertise in low-carbon design, retrofit, carbon sequestration, advanced building performance, materials science, and circularity. They will also play a critical role in climate adaptation, designing disaster-resilient buildings that withstand climatic variability and the increasing frequency of weather extremes. Participatory design at the neighbourhood scale, aimed at strengthening community resilience, will become a routine element of professional practice.

In architecture, climate action calls for an expanding skills landscape, which underscores the need for profession-wide action to ensure architects are equipped to meet the challenges ahead.

To understand the barriers and opportunities for climate action in Australia, this project involved travel to five countries to conduct 36 interviews with academics, students, practitioners, and representatives from regulatory and industry bodies. What emerged was unexpected—a compelling story about collective climate action, education reform and cultural transformation in the profession, spanning five years from 2018 to 2023, at the same time as the last interviews were completed.

This report outlines how a collective climate action movement in the UK, which expanded across Europe, resulted in education reform and the introduction of *climate literacy* as a core component of architecture curricula and professional training. By 2021, the climate action movement was maturing to encompass the idea of *just transitions*, and the recognised need for a fair and equitable process of moving toward a post-carbon society. With this, a youth-led protest movement grew, demanding structural reform and cultural transformation to the profession itself.

## The rise of climate literacy in architectural practice and education

Climate literacy emerged as a new concept in architecture as the first wave of climate strikes and protests swept the globe in late 2018 and early 2019. The momentum behind the idea of climate literacy in architecture was then reinforced through initiatives such as the Architects Climate Action Network (ACAN), Architects Declare, the Cross-Industry Action Group's Climate Framework, and the Anthropocene Architecture School, among others.

<sup>&</sup>lt;sup>5</sup> Stark et al. (2023)

The term began to infiltrate university curricula in the UK from late 2020, following the RIBA's release of a new education and professional development framework, *The Way Ahead*. The framework introduced climate literacy as a mandatory competency for RIBA Validation of degrees and for Chartered Members.

Given how quickly and organically the concept of climate literacy has been established in architecture, its definition is tacitly understood across multiple frameworks, initiatives and projects. The idea serves to push climatic design beyond a basic understanding of environmental principles to include skills like life-cycle analysis, knowledge of supply chains and waste management, and the ability to build community resilience. While climate-responsive design and passive principles are already well understood in the profession, climate literacy in architecture calls for integrating passive design principles with rapidly evolving scientific, environmental, social, and cultural knowledge.

#### **Motivation**

The motivation for this project stemmed from observations of the wave of climate activism that swept the architectural profession in the UK and Europe from 2018, which reached Australia but seemed to have lost momentum. Where international collective action led to significant reforms to architectural education, the profession in Australia has relied on a handful of new professional competencies in the 2021 National Standard of Competencies for Architects (NSCA) as a sufficient measure of progress in climate change education.

In 2018, media attention had grown around Greta Thunberg's *School Strikes for Climate* in Stockholm. Following the October release of the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Global Warming of* 

1.5°C, an international climate action movement took hold. The report successfully outlined, in layman's terms, the ramifications of unchecked climate change and millions joined in Global School Strikes in cities around the world.

At this time, Extinction Rebellion formed and staged high-profile protests, including a week-long demonstration in April 2019 at Waterloo Bridge in London. During this sit-down protest, a climate action network for architects, the Architects Climate Action Network (ACAN), was formed via a WhatsApp group, marking a pivotal generational shift within the profession.

In May 2019, the UK Architects Declare network was established through an open letter signed by 17 Stirling Prize winners, followed by the Royal Institute of British Architects (RIBA) declaring a climate emergency in June. The Architects Declare movement swept the globe, with Australian Architects Declare quickly following suit in July 2019, which was endorsed by the Australian Institute of Architects.

As the first stages of the COVID-19 pandemic unfolded in early 2020, the Australian Institute of Architects established a *Climate Action and Sustainability Taskforce* (CAST), and the Association of Architecture Schools of Australasia (AASA) formed a *Climate Action Working Group.*<sup>6</sup> However, without the youth-led momentum of ACAN and with international and state borders closed from 2020, COVID-19 generated what felt like two years of stalled introspection in Australia.

In reality, excellent examples of climate expertise and advocacy had grown across the Australian architectural profession at multiple scales—from national, state, regional, and local levels. However, without monitoring and reporting to enable connection between initiatives, there remains a widespread lack of awareness among architects as to what is happening in the profession in Australia.

Once the pandemic lockdowns lifted in 2022, and international and state borders opened, it appeared that Australia had missed the wave of collective action that was widely reported in international

<sup>&</sup>lt;sup>6</sup> Disclosure: Author was a member of CAST and the AASA Climate Literacy Working Group

architecture media. While a new NSCA introduced climate-related competencies into education and training from 2022, there was a lack of collaborative, connected momentum to drive transformative change across the profession. The idea of climate literacy was considered mainstream internationally, but the term was still barely recognised in Australian architecture schools.

Through my research, I knew slow progress in Australia was not due to a lack of willingness or motivation among the profession. This was confirmed by two national surveys conducted by the AASA *Climate Action Working Group* in 2021<sup>7</sup>, and a second survey of practitioners, also supported by the Australian Institute of Architects, in 2022<sup>8</sup>. Both surveys showed that, across architecture schools and practice, 93-95 per cent of more than 1500 respondents "agreed" or "strongly agreed" that they wanted to see more climate action in architecture education and practice.

In the months leading up to my Churchill Fellowship travels, I read more than 3,000 short-answer survey responses about climate change from practitioners, academics and students in architecture. An overwhelming majority reported high levels of concern and the belief that architects should be part of the solution to climate change. But despite this picture of a highly motivated profession, 82 per cent of respondents reported feeling obstructed by barriers to change.

Through this Churchill Fellowship, I aimed to understand the conditions that had enabled fast and widespread climate action in architecture elsewhere in the world. In contrast to Australia, where climate action in architectural practice and education was still fragmented and lacked national cohesion.

## Report structure

The front matter of this report includes an *Executive Summary*, followed by the *Recommendations*, which draw on findings to present nine recommendations for collective action, education reform, and cultural transformation in the Australian architectural profession.

Following this, the *Dissemination and Implementation* section asserts the need for dedicated funding and nationally coordinated support for architecture schools to update curricula. It presents evidence of a gap that threatens the profession's ability to align educational outcomes with emerging industry and environmental imperatives.

**Chapter 1:** The *Introduction* chapter provides background information for the research, including the motivation for the Churchill Fellowship, and outlines the full travel itinerary undertaken.

Chapter 2: The *Methods* chapter details the objectives of the project and research questions that directed the interview conversations. Information about the interview method is provided, including a program listing those interviewed by their primary affiliation or contribution to climate action.

Chapter 3: The main body of the report – Five Years of Climate Action in Architecture – summarises climate action in architecture from the first wave in 2018 through to the solidification of activist networks during the COVID-19 lockdowns, which were driven by an increased appetite for online connection. The following sections outline climate action initiatives within the Royal Institute of British Architects (RIBA), including a new education and professional development framework and a climate literacy competency. This was followed by the UK Architects Registration Board (ARB) review of the initial education and training of architects. A section on academic research and curriculum review projects seeking to embed

<sup>&</sup>lt;sup>7</sup> Brogden et al. (2022)

<sup>&</sup>lt;sup>8</sup> Brogden et al. (2023)

climate literacy in architecture education underscores the need for funding to translate education frameworks into curriculum reform. The chapter concludes with the rise of a second youthled protest movement, inspired by demands for just transitions, that culminated in a campaign to elect the first salaried, Black, and youngest-ever RIBA president at 31.

Chapter 4: The *Findings* chapter outlines key barriers and enablers to climate action, observed mainly in the UK and in other parts of Europe during the five years reviewed. Each finding includes a brief explanation and a list of examples of initiatives or events to support the observation.

**Chapter 6:** The *Conclusions* chapter synthesises findings from five years of international climate action and positions the potential impact of recommendations made for the Australian profession. This section emphasises the necessity of cultural transformation in the profession for architects to translate education reforms into practice.

Throughout this report, the value of understanding the interconnected nature of activism across stakeholder groups and within different parts of the sector is emphasised, which has made transformative change possible. The events detailed in the main body of this report have been summarised in a graphic timeline, attached as an appendix (see p. 93). The timeline includes hyperlinked information about the events and initiatives of regulatory and governance bodies, professional bodies, architecture education and collective action efforts.

## **Travel Itinerary**

Location	Dates		Activity		Affiliation		
Finland	19-Aug-23 — 27-Aug-23						
+Tallinn, Estonia	Day Trip	21-Aug-23	Event	ARCH4CHANGE Project Curriculum Launch	Day 1: Tallinn University of Technology, Estonia Erasmus+, EU		
-Helsinki		22-Aug-23	Event	ARCH4CHANGE Project Curriculum Launch	Day 2: Designmuseo, Helsinki Erasmus+, EU		
		23-Aug-23	Interview 01	Essi Nissonen	PhD Candidate // ARCH4CHANGE Architecture, Faculty of Built Environment, Tampere University		
		23-Aug-23	Interview 02	Dr Sofie Pelsmakers	Professor // ARCH4CHANGE Architecture, Faculty of Built Environment, Tampere University		
				Dr Elizabeth Donovan	Associate Professor // ARCH4CHANGE Aarhus School of Architecture		
		25-Aug-23	Interview 03	Dridil Gaziulusoy	Associate Professor School of Arts, Design and Architecture, Aalto University		
		25-Aug-23	Interview 04	Dr Mikko Jalas	Associate Professor // Director, Master of Creative Sustainability School of Arts, Design and Architecture, Aalto University		
England	28-Aug-23 — 14-Se	p-23					
+London		30-Aug-23	Interview 05	Mina Hasman	Sustainability Lead, Skidmore Owings and Merrill // Climate Framework, Cross-Industry Action Group // Council Member. Roval Institute of British Architects (RIBA)		
		31-Aug-23	Interview 06	Dr CJ Lim	Professor The Bartlett School of Architecture, University College London		
		31-Aug-23	Interview 07	Rachael Owens	Head of Sustainability, Buckley Gray Yeoman // Coordinator, Architects Climate Action Network (ACAN)		
		04-Sep-23	Interview 08	Dr Jenny Russell	Director of Education and Learning Royal Institute of British Architects (RIBA)		
ardiff, Wales	Day Trip	05-Sep-23	Interview 09	Dr Andy Roberts	Professor // Consultant to Architects Registration Board Welsh School of Architecture, Cardiff University, Wales		
<b>FLondon</b>		06-Sep-23	Interview 10	Sanaa Shaikh	Practitioner and Educator // Coordinator, Architects Climate Action Network (ACAN)		
		07-Sep-23	Interview 11	Charlie Edmonds	Practitioner // Co-Founder, Future Architects Front		
		08-Sep-23	Interview 12	Hwei Fan Liang	Practitioner and Educator // Coordinator, Architects Climate Action Network (ACAN)		
			Interview 13	Blanche Cameron	Lecturer // The Bartlett School of Architecture, University College London		
				Dr Danielle Purkiss Ha Rang Seo Marius Sidaracius	Postdoctoral Researcher Undergraduate Student Undergraduate Student		
		11-Sep-23	Interview 14	Richard Beet	Education Policy Manager Architects Registration Board (ARB)		
		13-Sep-23	Interview 15	Dr Judit Kimpian	Chair, Sustainable Architecture Group Architect's Council of Europe (ACE)		
		14-Sep-23	Interview 16	Sumita Singha 0BE	Director, Ecologic Architects // Council Member, Royal Institute of British Architects (RIBA)		
			Interview 17	Felicity Atekpe	Director of Professional Practice The Bartlett School of Architecture, University College London		
				Guang Yu Ren	Associate Professor The Bartlett School of Architecture, University College London		
		20-Sep-23	Interview 18	Craig Robertson	Associate and Head of Sustainability, AHMM // Steering Group Member, Architects Declare		
+Sheffield	28-Sep-23 — 30-Se	p-23					
		28-Sep-23	Seminar	Aidan Hoggard	Lecturer Sheffield School of Architecture, Sheffield University		
				Sam Brown	Lecturer Sheffield School of Architecture, Sheffield University		
				Mia Gaines Joseph Bass Hereward Leathart	SSoA Students for Climate Action Sheffield School of Architecture, Sheffield University		
			Presentation	Title: Designing Architecture	Education in a Climate Crisis, Liz Brogden		
			Event	CC-A Ctdt- t Clit			

Scotland	01-0ct-23 — 07-0ct-23	}			
+Edinburgh		02-Oct-23	Interview 19	Dr Simone Ferracina	Senior Lecturer // ESALA Climate Action Now Edinburgh School of Architecture and Landscape Architecture (ESALA). Edinburgh University
			Interview 20	Dr Kate Carter	Senior Lecturer // ESALA Climate Action Now ESALA, Edinburgh University
			Presentation	Title: Navigating landscapes	of creativity, imagination and hope in the anthropocene; Liz Brogden
			Interview 21	Gloria Lo	Educator, PhD Candidate (ESALA) // Past Coordinator, Architects Climate Action Network (ACAN) // Chair. Scottish Ecological Design Association (SEDA)
+Dundee	Day Trip	04-0ct-23	Presentation	Title: Generating agency and	hope through climate action in architecture; Liz Brogden
			Interview 22	Laurence Wood	Lecturer School of Architecture and Urban Planning, University of Dundee
			Interview 23	Rachael Livingstone	Students Climate Action Network (StuCAN) School of Architecture and Urban Planning, University of Dundee
+Edinburgh		05-0 ct-23	Interview 24	Scott McAulay	Founder, Anthropocene Architecture School // Architects Climate Action Network (ACAN)
+Glasgow	DayTrip	06-Oct-23	Interview 25	Sally Stewart	Head of School The Mackintosh School of Architecture, Glasgow School of Art
				Virginia Rammou	Senior Lecturer // Head of Architectural Technology The Mackintosh School of Architecture, Glasgow School of Art
			Presentation	Title: Navigating landscapes	of creativity, imagination and hope in the anthropocene; Liz Brogden
Ireland	08-Oct-23 — 14-Oct-23	1			
+Dublin		09-0ct-23	Interview 26	Dr Jennifer Boyer	Vice-President for Sustainability// Building Change TUDublin
			Interview 27	Emma Geoghegan	Head of Architecture // Building Change // ARCH4CHANGE School of Architecture, Building and Environment, TUDublin
				Noel Brady	Lecturer// Building Change School of Architecture, Building and Environment, TUDublin
				Miriam Delaney	Lecturer // Building Change School of Architecture, Building and Environment, TUDublin
+ Maynooth	Day Trip	10-0ct-23	Event	SCAPE Symposium	Studies of Conflict Culture, and the Political in Education SCAPE Symposium, Maynooth University
+Dublin		11-0ct-23	Interview 28	Sarah O'Dwyer	PhD Candidate, Welsh School of Architecture, Cardiff University // ARCH4CHANGE
		12-0ct-23	Interview 29	Dr Audrey Bryan	Associate Professor // Climate Change Education (CCE) School of Human Development, Dublin City University
		13-0ct-23	Interview 30	Dr Hugh Campbell	Professor // Head of Architecture // Building Change School of Architecture, University College Dublin
			Interview 31	Alice Clancy	Assistant Professor // Director of Teaching and Learning School of Architecture, University College Dublin
Follow-Up Zoom	Interviews				
[Edinburgh]		25-0ct-23	Interview 32	Sandy Halliday	Director Gaia Group // Founding Member, Scottish Ecological Design Association (SED)
[Dundee]		27-0ct-23	Interview 33	Dr Fionn Stevenson	Former Head of School, Sheffield School of Architecture, Sheffield University
[London]		01-Nov-23	Interview 34	Muyiwa 0 ki	President Royal Institute of British Architects (RIBA)
		21-Nov-23	Interview 35	Alex Tait	Director of Practice Royal Institute of British Architects (RIBA)
		23-Nov-23	Interview 36	Oliver Wilton	Associate Professor // Director of Design Technology The Bartlett School of Architecture, University College London

## Methods

As part of this Churchill Fellowship project, 36 interviews were conducted across Finland, England, Wales, Scotland, and Ireland from late August to early October 2023. Three interviews were completed online in November due to availability constraints.

Having observed rapid progress in climate literacy and action overseas from 2018, particularly in Europe and the UK, I was curious about the conditions that had enabled action in those regions. The holistic nature of climate change and its implications for architectural practice and education called for a systemic understanding of the challenge faced. I approached this research with the intention to establish a 'big picture' perspective on the architectural profession as an interconnected network of stakeholders. By seeking information on climate action across regulatory environments, professional bodies, architectural practice, architecture schools, and collective action groups, the aim was to understand opportunities, barriers, and potential connections across these domains.

#### **Research Questions**

The main question that underpinned this project was why climate action and literacy initiatives in the architectural profession in Australia weren't progressing as quickly as those seen in Europe and the United Kingdom. Three further questions guided the lines of inquiry.

- 1. How did professional and industry bodies, practitioners, academics, students, and action groups collectively act in response to climate change?
- 2. In what ways are schools of architecture engaging with climate change through their teaching programs?
- 3. What were the key enablers and barriers to climate action across the architectural profession?



#### **Interviews**

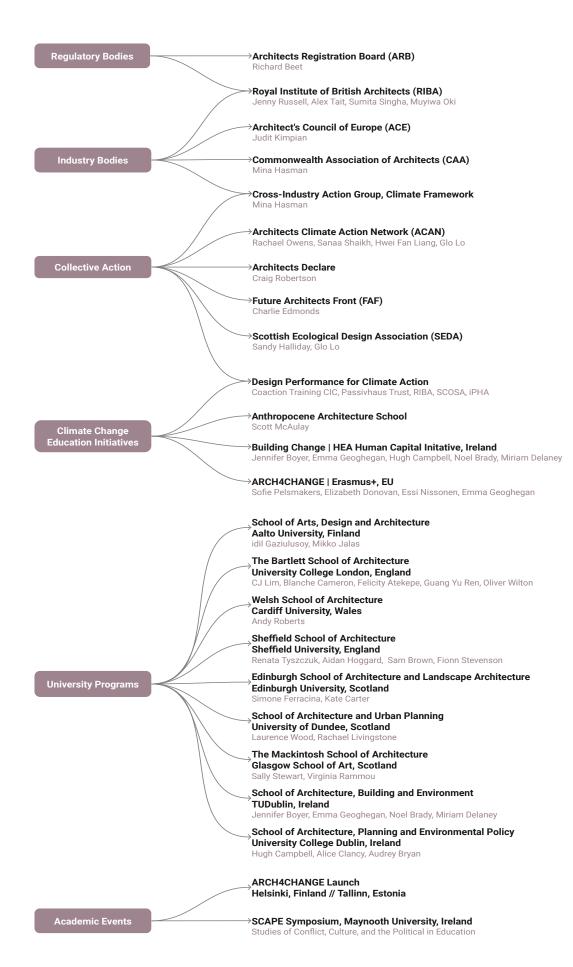
Interviews were conducted at cafes, workplaces and public places in each of the five countries visited. Conversations were not audio-recorded; instead, notes were taken during the interviews and expanded from memory immediately after each interview had finished.

At the time of these interviews—late 2023—the architecture profession was highly politically charged. The UK Architects Registration Board had just closed its consultation period on major reforms to education and training, and the Royal Institute of British Architects (RIBA) was preparing for Muyiwa Oki to commence his presidential term following a youth uprising that secured his election.

To ensure freedom and a degree of confidentiality, the Chatham House Rule was mentioned at the beginning of each interview. The rule states that, "participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed". Fellowship participants did consent to their names being listed, but quotes in this report are not attributed to any individual.

There was significant crossover between the initiatives and events discussed, showing strongly connected networks and overlap between projects. This allowed for cross-checking of facts and detailed insights from multiple perspectives.

#### **Travel Program**



# Five years of climate action in architecture

The following section of the report brings together insights from 36 interviews, along with information from a review of key sources, to construct a five-year timeline of climate action in architecture. The chapter begins with the first wave of climate strikes in 2018, and the formation of initiatives such as the Architects' Climate Action Network (ACAN) and Architects Declare. Next, the start of the COVID-19 pandemic and lockdowns is observed as a factor that intensified momentum for climate action, catalysing new collaborations between networks and organisations through online events. The narrative then follows how a wave of grassroots activism began to influence institutional reform, as evident in the RIBA and ARB reviews of their education and professional training frameworks, curricular changes in universities, and pioneering research by academics focused on climate change education in architecture. The section concludes by reflecting on growing youth disillusionment with the pace of change and the escalating calls to dismantle structural barriers and reform professional culture to create a more equitable and climate-responsive discipline.

A graphic timeline of the period, including hyperlinked resources, is available as an appendix to this report on p. 93.

## The first wave: architects join the climate protests

#### Oct 2018

## The IPCC 1.5 °C report and the formation of Extinction Rebellion

The Architects Council of Europe (ACE) had already released the 20 Architectural Projects against Climate Change<sup>9</sup> publication in March 2018, and Greta Thunberg had been engaged in the Friday School Strikes for Climate since August 2018.

Having reported on the impacts of climate change since the late 1980s, the rate of global warming has consistently exceeded climate modelling and

<sup>&</sup>lt;sup>9</sup> Architects Council of Europe (2018)

projections from the Intergovernmental Panel on Climate Change (IPCC). In October 2018, the IPCC released its *Special Report on Global Warming of 1.5* °C, which catapulted climate change into public awareness.<sup>10</sup> This report took a different approach, presenting the effects of global warming in terms accessible to the public, even schoolchildren.

The report was prepared by 91 authors from 40 countries and compared a 1.5 °C global warming scenario with a 2.0 °C scenario. A 1.5 °C temperature increase was described as an inevitable outcome given the quantity of carbon dioxide already present in the Earth's atmosphere. In contrast, the report illustrated how limiting global warming to 2.0 °C would require coordinated social, financial, and technical actions by 2030. The report's impact on policymakers and the public was unprecedented as it presented, in unambiguous terms, the widespread environmental destruction to be expected with 1.5 °C of global warming, compared to catastrophic and cascading environmental collapse unless warming was kept under 2.0 °C.

Amidst these School Strikes and the media frenzy over climate change, the Extinction Rebellion (XR) formed in **November 2018**<sup>11</sup> and held its first climate protest at Parliament Square in London. <sup>12</sup>

#### Apr 2019 A week of XR protests at Waterloo Bridge

In **March 2019**, the first of a series of *Global School Strikes* began, inspired by Greta Thunberg.<sup>13</sup> The same month, the *Anthropocene Architecture School* was founded by Scott McAulay, initially presented as an online library of resources.

In **April 2019**, Extinction Rebellion (XR) initiated a week-long sit-down, the *April Rebellion*, at Waterloo Bridge in London, attracting people from across the UK, and resulting in more than 1,000 activists arrested. <sup>14</sup> During the protests, a group of architects, graduates, students, and academics connected via WhatsApp to form the Architects Climate Action Network (ACAN). While the initial stages of ACAN remained London-centric with in-person meet-ups in pubs, the scale and reach of the initial XR protests had sparked a network of climate activists in architecture across the UK and Europe.

Social media was to become a key enabler for climate action among the more progressive portions of the profession, along with students and graduates. Platforms including WhatsApp and Instagram became fertile ground for connection, information sharing, and the shaping of a collective voice. But perhaps more crucially, proximity between major cities and accessibility via established rail networks enabled rapid cross-fertilisation of ideas through inperson gatherings.

<sup>10</sup> IPCC (2018)

<sup>&</sup>lt;sup>11</sup> Taylor (2020)

<sup>&</sup>lt;sup>12</sup> Murphy (2018)

<sup>&</sup>lt;sup>13</sup> Laville et al. (2019)

<sup>&</sup>lt;sup>14</sup> Taylor & Gayle (2019)



Figure 1. Architects Climate Action Network (ACAN) Logo

#### May 2019

#### **UK Architects Declare a Climate and Biodiversity Crisis**

Following the Waterloo Bridge protests, a cascade of climate action followed. In **May 2019**, *Architects Declare a Climate and Biodiversity Emergency*<sup>15</sup> was launched, initially by architects Steve Tompkins and Michael Pawlyn, and followed by all 17 UK winners of The Stirling Prize as founding signatories. Architects Declare launched with 11 principles for action and now has signatories from over 5,000 companies in 22 countries.

In early **June 2019**, *Architecture Education Declares* followed *Architects Declare*, with a manifesto written by a group of students from the Architectural Association, Bartlett, Cass, Central Saint Martins, Kingston University, Royal College of Art, Sheffield University, Westminster University and over 2,000 supporting signatures. The student declaration took the form of an open letter, published online, that appealed to the profession to recognise the vital role of architectural education in addressing the climate and ecological crisis. It contended that architecture not only shapes the built environment but also influences social and political systems, yet current educational models fall short of addressing the ecological and political consequences of practice.<sup>17</sup>

The declaration served to connect concerned faculty and academic staff with ACAN members and student activists, which led to the formation of climate action groups in schools across the UK. These groups were established in many of the schools I visited, and academics often mentioned staff 'away days' and curriculum development activities focused on climate action throughout the remainder of 2019.

<sup>&</sup>lt;sup>15</sup> Architects Declare (2019a)

<sup>&</sup>lt;sup>16</sup> Jessel (2019)

<sup>&</sup>lt;sup>17</sup> Architecture Education Declares (2019)



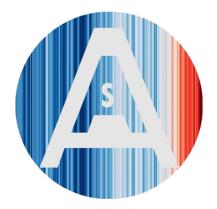


Figure 2. UK Architects Declare logo (left); Figure 3. Anthropocene Architecture School logo (right)

The Anthropocene Architecture School was also officially launched in **June 2019** at the Architecture Fringe Festival in Glasgow.<sup>18</sup> As the Fringe Festival ended, and following Architects Declare and Architecture Education Declares, the Royal Institute of British Architects (RIBA) formally agreed to join the global declaration of an environment and climate emergency at the triannual meeting of RIBA council members.<sup>19</sup>

#### **Sep 2019**

#### Millions march in the Global Climate Strikes

The Waterloo Bridge protests, followed by a cascade of architects declaring a climate emergency, were punctuated by the largest climate strike in history, the *Global Week for Future*, in late **September 2019**. The strikes expanded on Greta Thunberg's student-led *Global School Strikes*, involving an estimated 7.6 million people who marched worldwide. <sup>20</sup> The strikes involved approximately 30,000 people at over 200 events across the UK, with 100,000 people gathered at the London rally alone.

"It felt like everything was happening all at once"

Fellowship interview quote

The first event organised by Architects Declare was held in **September 2019** at the Barbican as a series of talks on *The Architecture of Emergency.*<sup>21</sup> Architects Declare held its first official conference in **November 2019** at the Battersea Arts Centre, attracting over 350 Architects and Engineers, with talks from Jeremy Lent and Kate Raworth.<sup>22</sup>

<sup>&</sup>lt;sup>18</sup> Architecture Fringe (2019)

<sup>19</sup> Hurst (2019)

<sup>&</sup>lt;sup>20</sup> Middleton (2019)

<sup>&</sup>lt;sup>21</sup> Barbican Theatre (2019)

<sup>&</sup>lt;sup>22</sup> Architects Declare (2019b)

Also in **September 2019**, ACAN held its first open meeting and public events in London.<sup>23</sup> Attendees broke into working groups and thematic groups, committing to run fortnightly public meetings to maintain momentum, which led to the first ACAN Architects Assembly in **October 2019**.<sup>24</sup>

During **September 2019**, the Anthropocene Architecture School ran a workshop at the XR *Rebel Rising Festival in* Aberdeen, followed by four *Crisis Studios* in Glasgow, which ran monthly from **November 2019** to **March 2020**.<sup>25</sup>

#### Nov 2019 Tom Bennett trial and the right to protest

There was a strong sense that the powers that be in the architectural profession endorsed climate activism. This was evident in the move by 17 high-profile Stirling Prize winners who collectively formed UK Architects Declare, through action taken by RIBA, and the formation of climate action groups in architecture schools.

The trial of London architect Tom Bennett in **November 2019** provided one of the first opportunities for UK climate activists to unite. Bennett, age 35, was arrested during the XR Waterloo Bridge 'April Rebellion' earlier that year and was found guilty under Section 14 of the Public Order Act and given a nine-month conditional discharge and ordered to pay £730 in court costs.<sup>26</sup>

The case raised questions about the UK Architects Registration Board's (ARB) position on climate activism. The Architects Code requires that architects report criminal convictions to the ARB and, where the conviction is relevant to an architect's fitness to practise, the ARB can revoke an architect's registration. In **December 2019**, ACAN released an open letter to the ARB with almost 500 signatures of support, which led to a meeting later that month.<sup>27</sup> In response to the circumstances, the ARB issued guidance clarifying that protesting is not prohibited under the Architects Code.<sup>28 29</sup>

<sup>&</sup>lt;sup>23</sup> Broadstock (2019)

<sup>&</sup>lt;sup>24</sup> Building Centre (2019)

<sup>&</sup>lt;sup>25</sup> Young (2020)

<sup>&</sup>lt;sup>26</sup> Extinction Rebellion (2021)

<sup>&</sup>lt;sup>27</sup> ACAN (2019)

<sup>&</sup>lt;sup>28</sup> ARB (2019b)

<sup>&</sup>lt;sup>29</sup> ARB (2019a)

## **Summary**

#### The first wave: architects join the international climate protest movement

Architects engaged in climate action were highly responsive to broader social and political contexts beyond the profession. They drew inspiration from movements such as the Global School Strikes and Extinction Rebellion, used the Covid-19 lockdowns to connect online, and joined initiatives including Retrofit First and Just Transitions.

Social media played a crucial role in mobilising progressive thinkers, students, and recent graduates through the Architects Climate Action Network (ACAN). This early momentum enabled resource sharing, collaborative campaign development, and the establishment of a collective, independent voice for architects.

Established transport networks and relatively short travel distances enabled regular in-person meet-ups that connected people nationally and internationally, consolidating momentum being generated online. High population density and close proximity of major cities across the UK and Europe further supported the rapid exchange of ideas and dissemination of information.

Endorsements from influential individuals and organisations—including signatories to Architects Declare, support from the Royal Institute of British Architects (RIBA), and the UK Architects Registration Board's (ARB) tolerant response to the Tom Bennett trial—reinforced a growing sense of collective agency among climate activists.

## Solidarity in isolation: climate action during the Covid-19 lockdowns

#### **Apr 2020**

#### The first COVID-19 lockdowns

Surprisingly, the efforts of ACAN and Architects Declare were strengthened through a second wave of climate action during the COVID-19 lockdowns in the UK from **April 2020**. Springtime energy, coupled with the social isolation of lockdowns, generated a strong appetite for online events, especially in the early months of the pandemic. Architecture schools had moved classes online, and academics were searching for resources to support online teaching.

"Lots of people suddenly had time ... and were freed up from paying the bills."

Fellowship interview quote

The demand for online meetings and teaching resources coincided with many graduate workers being in lockdown without work, while receiving income through the UK pandemic furlough scheme. Seeking purpose and connection, and keen to continue the climate activism that had been building in the months leading up to the pandemic, ACAN members used this 'free time' to host a series of online events and lectures.

"COVID hit, and ACAN became very digital and very international."

Fellowship interview quote

By May 2020, ACAN had begun exploring ways to build 'climate literacy' in architecture education through an ambitious 100-day webinar series on climate change issues as they related to architectural practice and education. The series aimed to raise awareness with studio tutors, who were teaching online during the pandemic and seeking ways to keep students active and engaged in schools of architecture. The ACAN coordinators from that time recall that hundreds of people were dialling in from across the UK and beyond.

"This part was affirming and easy, to just get people talking and connected."

Fellowship interview quote

In **July 2020**, ACAN began gathering information that would evolve into its *Climate Curriculum Campaign*. Through this initiative, ACAN coordinators hosted two ACAN Educators Workshops, the first titled *Climate Crisis*, which focused on education frameworks and featured presentations from Mina Hasman, Fionn Stevenson, and students of the ACAN Education working group. A second ACAN Educator workshop on *Brief Writing* was held in **August 2020**, which included Heads of Schools and senior representatives from 30 architecture schools, as part of a collaboration between ACAN, the RIBA, and the Standing Conference of Schools of Architecture (SCOSA).<sup>30</sup>

#### **Sep 2020**

#### **ACAN launches its Climate Curriculum Campaign**

An initial focus on climate literacy in ACAN was driven by the fact that many members were tutoring or enrolled as students in architecture schools, especially around London, but also across the UK, Ireland, and other parts of Europe. For this reason, the first ACAN working group was its Education Working Group, with a dynamic list of groups forming in subsequent years as ACAN's work expanded. Its stated goal was to raise awareness of climate change and build climate literacy through teaching programs in architecture schools.<sup>31</sup>

The material from the ACAN Educators Workshops held in **July** and **August 2020** was collated by ACAN coordinator Hwei Fan Liang and used to formally launch the *Climate Curriculum Campaign* in **September 2020**.



Figure 4. ACAN Climate Curriculum Campaign marketing material

The campaign started at the same time as the EU-funded ARCH4CHANGE project commenced, with the release of the ACAN Education Toolkit in **November 2020**, <sup>32</sup> <sup>33</sup> conceived as an interim solution until the ARCH4CHANGE digital climate curriculum was developed.

<sup>&</sup>lt;sup>30</sup> Previously called the Standing Conference of Heads of Schools of Archietcture (SCHOSA)

<sup>&</sup>lt;sup>31</sup> ACAN (n.d.-b)

<sup>&</sup>lt;sup>32</sup> ACAN (2020)

<sup>&</sup>lt;sup>33</sup> ACAN (2021a)

At the time, known tutor-led climate groups in architecture schools who were promoting the use of the *ACAN Education Toolkit* included:

- ESALA Declares, Edinburgh School of Architecture and Landscape Architecture
- Anthropocene Architecture School, Glasgow
- SSoA Students for Climate Action, Sheffield School of Architecture
- EARTH, Birmingham City University
- UWE Students Climate Action Group, University of the West of England
- AA Action, Architectural Association School of Architecture, London
- Bath Climate Action Group, University of Bath
- Brighton Architecture and Interior Architecture Society (BIAAS), University of Brighton

#### Jan 2021 Easing of Covid-19 restrictions across the UK

As Covid-19 restrictions began to ease in **January 2021**, and the UK released its Roadmap out of Covid Lockdown in **February 2021**, the latent energy that had been gathering through online gatherings was unleashed as a third wave of climate action in the Spring of 2021. With the networks solidified and strategies formed, climate action groups felt primed for translating impact.

"Work just feels like fighting things all the time. In ACAN, you find the people who also want change."

Fellowship interview quote

Following the launch of its *Climate Curriculum Campaign* in **October 2020**, ACAN announced its support for the Architects Journal's (AJ) *Retrofirst Campaign*, which had built a case over 12 months for immediate government action to prioritise reuse and adaptation of existing buildings over demolition and rebuild. This same month, the AJ launched its *Climate Champions* podcast, hosted by Hattie Hartman, featuring a series of interviews with climate activists, including many affiliated with ACAN. In **February 2021**, ACAN launched a third campaign, *Regulate Embodied Carbon*, which led to the further expansion of working groups now active in the network.

An emphasis on translating impact was also seen through the work of Architects Declare during this time. In **April 2021**, Architects Declare ran a two-day online conference titled Ideas into Action, offering examples of translating bold ideas into practical action and reality.

#### Mar 2021 Students lead climate action in architecture schools

In March 2021, ACAN launched StuCAN, the Students' Climate Action Network, to connect all the student climate action groups in architecture schools. As an extension of ACAN's Climate Curriculum Campaign, StuCAN quickly became a unifying platform for students around the country to share resources and plan events.



Figure 5. Students Climate Action Network (StuCAN) logo

The Sheffield School of Architecture's (SSoA) *Architecture Students for Climate Action Society* demanded curriculum change of faculty staff in a school that was already "well known for its ethos of social conscience and sustainability".<sup>34</sup> Upon demanding climate action through their education, students at Sheffield received immediate agreement and support. Of the academics I interviewed, many expressed similar sentiments – that students hold far more power than they often realise to enact change in their education.



Figure 6. Sheffield School of Architecture. Photo: Author, from Churchill Fellowship.

At the Edinburgh School of Architecture and Landscape Architecture (ESALA), a different form of Climate Action Group had formed. With a mirrored governance structure for staff and students, the group was granted official status as a working group within the school and an allocated budget.

<sup>&</sup>lt;sup>34</sup> Dezeen (2021)

This validation enabled the school to participate in COP events, among other activities. At the time of the interviews, engagement through the ESALA Climate Action Group included an allocated workload for staff tasked with building climate literacy across their programs.

"Students have a lot more power than they often realise. When they make demands, the school has to listen."

Fellowship interview quote



Figure 7. Edinburgh School of Architecture and Landscape Architecture. Photo: Author, from Churchill Fellowship.

#### Synergetic action across the profession

ACAN and Architects Declare could operate effectively in parallel due to key differences in their membership and objectives. The Architects Declare movement generated a coalition of businesses and practices, where ACAN formed as a collective of individuals. The result has been the development of two distinct cultures between the groups – with Architects Declare evolving as a self-governing body that supports progress toward achieving the commitments made by its signatories, and ACAN as a network aiming to create change through political campaigning and lobbying, building awareness, and knowledge-sharing.

Core members of the initial ACAN Education Working Group went on to develop other climate action initiatives, which would become crucial in later years. For example, Sofie Pelsmakers led the ARCH4CHANGE project<sup>35</sup> in collaboration with academics across five European universities; Mina Hasman established the Climate Framework in consultation with a wide range of built environment stakeholders;<sup>36</sup> and Scott McAulay continued to achieve broader impact across architecture schools through the Anthropocene Architecture School.<sup>37</sup>

ACAN and Architects Declare are complementary as a synergetic pincer movement. Architects Declare is practice-focused, and ACAN is a collection of individuals. The advantage is that ACAN is almost anonymous, and it attracts many people working in practices that will never sign up to Architects Declare.

#### Fellowship interview quote

ACAN became a pathway for some to enter sustainability-focused roles, as sustainability lead roles began emerging in large practices. ACAN provided the benefit of a non-commercial platform for generating open-access material, free from the barriers posed by private companies' concerns about intellectual property. Many ACAN members report engaging with working groups for support and solidarity, a welcome change from workplace resistance to climate action. Architects Declare and ACAN are complementary in their differences, frequently collaborating on cross-promotions and campaigns, including joint statements on key issues.<sup>38</sup>

<sup>35</sup> ARCH4CHANGE (n.d.)

<sup>&</sup>lt;sup>36</sup> Cross-Industry Action Group (n.d.)

<sup>&</sup>lt;sup>37</sup> McAulay (n.d.)

<sup>&</sup>lt;sup>38</sup> For example, (ACAN, (2021b)

## **Summary**

#### Solidarity in isolation: climate action during the Covid-19 lockdowns

The Covid-19 lockdowns consolidated and expanded climate action networks due to a strong appetite for online engagement. Junior workers in architectural practices were more likely to be furloughed, which gave them time and energy to advance climate action while continuing to receive partial income through the Coronavirus Job Retention Scheme.

'Climate Action Groups' formed within schools of architecture across the UK, where students discovered their capacity to demand curriculum change. These groups were later connected through the establishment of StuCAN as part of ACAN.

ACAN's initial focus was architecture education, delivered through webinars aimed at building the capacity of tutors and studio teachers, and through the compilation of resources for staff and students. This emphasis on education was amplified by initiatives such as the Anthropocene Architecture School, ARCH4CHANGE, Building Change, and the Climate Framework, alongside reviews of education frameworks by RIBA and ARB.

# "The Way Ahead": climate literacy and the Royal Institute of British Architects

The Way Ahead is the Royal Institute of British Architects (RIBA) education and professional development reform programme. Designed to modernise the education and training of architects in the UK, it was intended to make the profession more inclusive, responsive to contemporary challenges, and globally relevant. It was launched in response to longstanding critiques of the traditional architecture education model (the three-part structure of Parts 1, 2, and 3). Like ARB's *Tomorrow's Architects*, it sought to shift focus from rigid time-based stages to learning outcomes and competency-based education.

The Royal Institute of British Architects (RIBA)



The Royal Institute of British Architects (RIBA) is a membership body for architecture founded in 1834. The organisation functions as an outward-facing advocacy body as well as providing continuing professional development (CPD) for practising architects, setting competency standards for chartered member status, and validating architecture programs.

RIBA is not the licensing or registration body, and the standards it sets are generally understood to be more ambitious than those mandated by the Architects Registration Board (ARB). Even though the professional standards set by RIBA are voluntary, the institute is a powerful international brand with over 53,000 members worldwide.<sup>39</sup>



Figure 8. Royal Institute of British Architects (RIBA), Portland Place, London. Photo: Author, from Churchill Fellowship.



Figure 9. RIBA foyer, Portland Place, London. Photo: Author, from Churchill Fellowship.

#### **RIBA Climate Action**

During the cascade of action surrounding the March 2019 Global School Strikes, April 2019 Waterloo Bridge week-long sit-down protests in London, and following the open letter from UK Architects Declare in May 2019, the Royal Institute of British Architects (RIBA) declared a climate emergency in June 2019. Shortly after, the RIBA began developing the RIBA 2030 Climate Challenge as guidance material outlining a voluntary challenge for architectural practices intended to build climate literacy capacity across the profession. The RIBA also began collecting data so that the RIBA could grow industry knowledge and deliver targeted research and drive ambitious targets across the profession.

In **October 2019**, RIBA released version 1 of the *RIBA 2030 Climate Challenge*.<sup>40</sup> While voluntary, the challenge validated the need for performance targets for energy and water use and reinforced positions held by ACAN and Architects Declare and lobbying that was to come for legislative changes.

At the same time as the ACAN *Climate Curriculum Campaign* and the launch of the ARCH4CHANGE project, the RIBA released its *RIBA Sustainable Outcomes Guide* in **December 2019**. The guide was one of the first examples of the application of the Sustainable Development Goals (SDGs) through architectural practice. It aimed to describe approaches in support of architects taking the *RIBA 2030 Climate Challenge*.<sup>41</sup>

#### **Sep 2020**

## 'The Way Ahead' as the RIBA's new education and training framework

In **September 2020**, the RIBA released its new Education and Professional Development Framework, *The Way Ahead.*<sup>42</sup> The framework represented the first single RIBA standard covering pre- and post-registration education and professional development. The framework foregrounded the requirement for an adaptation in response to the growing complexities of contemporary practice, including the "breadth and flexibility to facilitate the development of specialist expertise".

The education of future chartered architects, and the professional development of those who have already achieved chartered status, needs a sharpened focus on the core knowledge, skills and experience required to respond to the immediate and mid-term challenges facing our world, society and industry. 43

<sup>&</sup>lt;sup>40</sup> Front matter, RIBA (2021b)

<sup>&</sup>lt;sup>41</sup> Clark & Tait (2019)

<sup>&</sup>lt;sup>42</sup> RIBA (2020)

<sup>&</sup>lt;sup>43</sup> RIBA (2020), p. 10

Notably, the framework established a greater emphasis on the ethical role of the architect. First, through the introduction of 'Climate Literacy' as a Mandatory Competence for all UK Chartered Members, which also aligned with trends at the time, where large 100+ person practices were beginning to hire 'sustainability leads' during 2020/21. Second, *The Way Ahead* placed a stronger emphasis on health and life safety following the Grenfell Fires and anticipated the new Building Safety Act, signalling that additional mandatory competencies were to come.



Figure 10. RIBA marketing material for The Way Ahead.

### **Dec 2020**

# Scott McAulay of the Anthropocene Architecture School is named as RIBAJ 'Rising Star'

In **December 2020**, Scott McAulay was named a RIBA Journal Rising Star in recognition of the four Anthropocene Architecture School *Crisis Studios*, run between **November 2019** and **March 2020**.

The publicity provided a platform for McAulay to participate in interviews and go on to publish numerous articles on the need for architecture education reform. The ongoing success of the Anthropocene Architecture School until its close in early 2025 generated student learning experiences and teacher awareness on topics that tenured academics were still working out how to articulate.

McAulay's persistent calls for change are matched with generosity in sharing resources through an online library<sup>44</sup> and a range of interviews and articles, including:

- Unlearning Powerlessness: Reflections, Recordings and Resources, Medium.<sup>45</sup>
- o A new education for climate change, RIBA Journal.<sup>46</sup>
- o A Letter to the Earth: Blurring, Medium.<sup>47</sup>

<sup>&</sup>lt;sup>44</sup> Anthropocene Architecture School (n.d.)

<sup>&</sup>lt;sup>45</sup> McAulay (2023)

<sup>&</sup>lt;sup>46</sup> McAulay (2019)

<sup>&</sup>lt;sup>47</sup> McAulay (2020b)

- Architecture schools need to reform their teaching to combat climate change, The Architects' Journal.<sup>48</sup>
- Failure to teach net-zero architecture skills "is negligent and verges on denialism," says Anthropocene Architecture School founder, Dezeen.
- AJ Climate Change Champions Podcast: Why architectural education needs radical reform, The Architects' Journal.<sup>50</sup>

#### **Dec 2020**

# High-profile architects withdraw from Architects Declare

In **December 2020**, both Fosters and Partners and Zaha Hadid Architects withdrew from Architects Declare as two of their 17 founding signatories. This was a response to an open letter issued in **July 2020** by ACAN, challenging Fosters and Partners for their involvement in aviation projects, as well as growing differences in opinion with Architects Declare. The firms expressed that "aviation, like any other sector, needs the most sustainable infrastructure to fulfil its purpose" and that the "absolute approach" taken by Architects Declare is "setting the profession up for failure". 52

Despite this objection from two high-profile practices to the work of Architects Declare group, the RIBA continue reinforcing and connecting with climate action initiatives, including with UK Architects Declare, the Climate Framework, and ACAN.

### Jan 2021

# The Cross-Industry Action Group Climate Framework

In **January 2021**, the Cross-Industry Action Group launched its *Climate Framework*. Intended to provide a shared language across built environment industries, the framework presents a common curriculum structure organised around six overarching themes, of (1) Human Factors, (2) Circular Economy; (3) Energy and Carbon; (4) Water; (5) Ecology and Biodiversity, and (6) Connectivity and Transport, each with sub-themes and mapped to the SDGs. The goal of the framework was to enable a common language for holistic knowledge and skills around climate change across the built environment sector.

<sup>&</sup>lt;sup>48</sup> McAulay (2020a)

<sup>&</sup>lt;sup>49</sup> Crook (2021)

<sup>&</sup>lt;sup>50</sup> Hartman (2021)

<sup>&</sup>lt;sup>51</sup> Ravenscroft (2020a)

<sup>&</sup>lt;sup>52</sup> Ravenscroft (2020b)

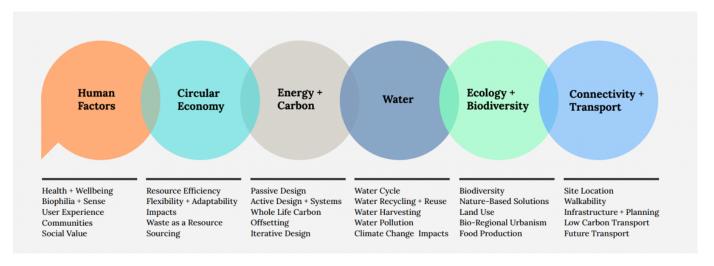


Figure 11. The Climate Framework themes.

The "common structure for climate knowledge" was intended to build a shared, online library and learning platform for professionals and academics to develop open-source tools and content.

Led by Mina Hasman, the *Climate Framework* was co-created and widely endorsed by over 70 practices, professional bodies, universities, and independent organisations across the built environment sector. Hasman went on to be included in TIME100 Climate, which was TIME's inaugural list of 100 of the world's most influential leaders driving climate action in business in **November 2023**.<sup>53</sup>

#### Mar 2021

# The RIBA adopts the Climate Framework

In **March 2021**, the RIBA adopted the *Climate Framework* as its *Climate Literacy Knowledge Schedule* and included it as an appendix to *The Way Ahead*<sup>54</sup> to inform new mandatory competencies around climate change in education and training. The RIBA knowledge schedule included the Climate Framework's six themes, while adding "global and built environment climate fundamentals" and "RIBA Sustainable Outcomes and common threads.

During this time, the Cross-Industry Action Group also collaborated with the RIBA, ACAN and SCOSA to run a national climate literacy skills survey of staff in UK Schools of Architecture based on the *RIBA Climate Literacy Knowledge Schedule*, with the report published in **April 2021**.

The *Climate Framework* is also listed as a Learning Resource on the Architects Registration Board (ARB)'s *Sustainability Competence Learning Resource* on the UK Architects Registration Board (ARB) website.<sup>55</sup>

<sup>&</sup>lt;sup>53</sup> Hasman (2023)

<sup>&</sup>lt;sup>54</sup> RIBA (2021c)

<sup>&</sup>lt;sup>55</sup> ARB (n.d.)

Later, in **March 2023**, Hasman published the RIBA Climate Guide, which is structured according to the six themes of the *Climate Framework*. The book expands on the competencies outlined in the *RIBA Climate Literacy Knowledge Schedule* to help architects meet the *RIBA 2030 Climate Challenge*.

### **Sep 2021**

# Joint *Built for the Environment* report by RIBA and Architects Declare

In the lead-up to COP26, the RIBA collaborated with Architects Declare on the *Built for the Environment Report*, released in **September 2021**. The report made a series of recommendations to governments, including the need for policy reform to achieve net zero targets, climate adaptation and mitigation strategies, interdisciplinary sector-scale, open access information, and a greater focus on social justice.

The report positioned the built environment as both a major contributor to the climate crisis and a key lever for transformative change. It urged government, industry, and education providers to treat climate and biodiversity as interconnected priorities.

### Oct - Nov 2021

### **Built Environment Summit and COP26**

In **October 2021**, the RIBA hosted a global *Built Environment Summit* in partnership with Architects Declare. The conference was based on the *Built Environment Report* and aimed to "encourage interdisciplinary thinking to tackle the [climate] crisis and provide inspiration to drive significant behaviour change". <sup>56</sup>

Architects Declare also launched its *Practice Guide*<sup>57</sup> at the Built Environment Summit, which was presented the following month at COP26 in Glasgow in **November 2021**.<sup>58</sup> ACAN and the Anthropocene Architecture School were also present at COP26, which served as a convergence point for these groups to not only protest and advocate but also model alternative ways of practising, learning, and thinking as architects in the climate emergency.

# May to Sep 2022

# **Practice Action Masterclass Series on climate literacy**

In 2022, UK Architects Declare held five online masterclasses on topics in the Architects Declare Practice Guide. The masterclasses started with a Designing your own Practice Roadmap launch event in **April 2022** to share expert guidance on using the principles in the Architect's Declare Practice Guide for developing sustainable projects and practices.

The masterclasses were run monthly in collaboration with ACAN and in partnership with the RIBA. Topics included Climate Literacy (May 2022),

<sup>&</sup>lt;sup>56</sup> RIBA (2021a)

<sup>&</sup>lt;sup>57</sup> Ravenscroft, (2021)

<sup>&</sup>lt;sup>58</sup> UN (2021)

Understanding Impact (**June 2022**), Working with the Client (**July 2022**), Collaboration and Learning within Practice (**August 2022**), and Closing the Loop (**September 2022**).<sup>59</sup>

The series ended in **December 2022** with a Practice Action Assembly finale, held in London, Edinburgh, and online.

# Summary

### "The Way Ahead": Climate literacy and the Royal Institute of British Architects

As a membership organisation, RIBA offers voluntary chartered architect status and degree validation and responded swiftly to members' demands for climate action.

The Way Ahead, introduced in 2021, was a new education and professional development framework that included a Climate Literacy Knowledge Schedule.

RIBA translated voluntary climate action initiatives into institutional change through its education framework, collaborating with ACAN, Architects Declare, and the Standing Conference of Schools of Architecture (SCOSA), and incorporating the Climate Framework into its *Climate Literacy Knowledge Schedule*.

RIBA also worked actively with voluntary climate action groups such as ACAN and Architects Declare to co-author research, develop guidance materials, and provide continuing professional development (CPD).

<sup>&</sup>lt;sup>59</sup> UK Architects Declare (2022)

# "Tomorrow's Architects": the UK Architects Registration Board education review

Tomorrow's Architects was a proposal put forward by the UK Architects Registration Board (ARB) to modernise the initial training and education of architects. As part of a major reform of architectural education and professional training, it aimed to make the pathway to becoming an architect more accessible, inclusive, and aligned with contemporary needs, particularly in response to climate change, safety, and ethical practice.

## The UK Architects Registration Board (ARB)



The UK Architects Registration Board (ARB) is a single statutory body which acts as a regulator of the architectural profession for England, Scotland, Wales, and Northern Ireland. As an independent professional regulator, the ARB was established by Parliament through the Architects Act in 1997. It is responsible to the government for prescribing – or 'recognising' – the qualifications needed to become an architect and keeping the register of architects. They protect the code of conduct for the profession, investigate complaints, and ensure that only people on the register offer their services as architects.

The Architects Registration Board is a public corporation embedded within a government department of the Ministry of Housing, Communities and Local Government. For this reason, it is argued that the job of the ARB is to maintain an acceptable minimum standard for the profession.

"The job of the regulator is to get out of the way"

Fellowship interview quote

There is a common misconception that the Royal Institute of British Architects (RIBA) is a statutory body. Instead, it is a professional membership body that offers "Chartered Member" status, which is a voluntary status for a registered architect. Tensions arise due to the RIBA's ability to set aspirational professional standards, whereas government agendas constrain the ARB.



Figure 12. The Architects Registration Board (ARB) main office in London. Photo: Author from Churchill Fellowship.

In the UK, the ARB recognises a three-part process—Part 1, Part 2, and Part 3—as the formal pathway to becoming a registered architect. These stages correspond to levels of education, practical experience, and professional competence:

• Part 1: Undergraduate Level

Often, a RIBA-validated Bachelor of Arts or Bachelor of Science (Hons) degree in Architecture lasts three years.

• Part 2: Postgraduate Level

Often, a two-year Master's degree, such as the Master of Architecture, is also RIBA-validated and ARB-prescribed.

• Part 3: Professional Examination

Assesses a candidate's readiness for independent architectural practice. Involves an oral exam, a written case study, and a professional experience record.

### **Aug 2020**

# The ARB commissions SQW for an independent review of architects' competencies and industry demand

In **August 2020**, the SQW consultancy firm was engaged to carry out research to review current and future competencies required for architects in the UK, aiming to ensure the profession remained fit for purpose amid rapidly evolving societal, environmental, and technological demands.

The research became the evidence base for ARB's decision to modernise architectural education and move away from the rigid Part 1–2–3 model. The work paved the way for future consultation and the adoption of an outcomes-based regulatory framework, which would become the core of *Tomorrow's* 

Architects. 60 Through a literature review, analysis of labour market data, surveys, interviews and focus groups, over 4,500 practising architects. academics, and architecture students participated in some form. 61

### Feb 2021

# The ARB publishes SQW's Review of Architects' **Competencies**

In **February 2021**, the ARB released SQW's *Review of Architects* Competencies Report, which identified a range of drivers for change, including the climate emergency, building safety, digital transformation, and ethics and inclusion in the profession. These were identified as common elements in educational content for architects globally.

The SQW report highlighted the need to update the ARB's current system of architectural competencies (Parts 1, 2, and 3) to reflect modern professional realities. The findings showed strong support for flexible and diverse routes to registration, and wider access to the profession, including apprenticeship pathways. Barriers to access that impact diversity in the profession were also outlined, including the cost and duration of an education in architecture.

The report showed that core competencies for architects are changing. The findings outlined how the current system was not well structured to integrate other architecture-related professionals or support specialisation. There was strong support across stakeholders for recognising specialist competencies for example, in climate-responsive design or advanced digital tools—which may go beyond the baseline requirements for registration. It also presented the idea of a core-plus model in which all architects meet a defined set of core competencies with the option to build expertise in specialisation areas.

A "core-plus" model was presented as an approach in which all architects meet a defined set of core competencies, with the option to build expertise in specialisation areas. The report also showed support for an outcomes-based model for modernising the architecture profession in which an architect is assessed according to what they can do, rather than how or where they were educated. The report suggested that an outcomes-based approach would improve accessibility, transparency, and adaptability while maintaining high standards of public protection.

### Oct 2021

# The ARB on modernising the initial education and training of architects

In October 2021, the ARB released a discussion paper, *Modernising the* Initial Training and Education (IET) of Architects, which proposed a bold departure from legacy systems in favour of a more accessible, practicealigned, and adaptive education framework.

<sup>60</sup> ARB (2023b)

<sup>61</sup> SQW (2021)

In the paper, the ARB used data from the SQW survey of over 4,400 architects, in which respondents had highlighted the changing nature of the role of the architects, and a trend away from generalist forms of practice and a broad skill set, toward specialist areas of practice in architecture. In the discussion paper, the ARB argued for improved access to specialised career pathways through architecture education, inter-professional learning between allied fields and alternative routes into the profession, and the move toward an outcomes-based approach to qualification as an architect.

The discussion paper also highlighted the climate emergency as a key reason for modernising architecture education and the need to integrate sustainability and environmental responsibility as a core learning outcome for all architecture students. Citing the SQW survey of more than 4,400 architects, the discussion paper explained that 88% of respondents thought competence relating to sustainability would need more emphasis.<sup>62</sup>

Climate change is one of the defining challenges of our time, and architects have a significant role to play in addressing it. Through robust, sustainable practice and design, architects can reduce the effects of climate change in the built environment. <sup>63</sup>

The release of the discussion paper in **late 2021** marked the beginning of a period of public engagement, particularly with the profession and the Higher Education sector. The discussion paper and subsequent engagement process included a *Modernising the IET of Architects* survey, which was open for four months and closed in **January 2022**.

#### Jun 2022

# The ARB release "Modernising the Initial Education and Training of Architects: Analysis Report"

In **June 2022**, the ARB released the analysis report on its *Modernising the IET of Architects* survey, which had been open from **October 2021** to **January 2022**. The report further reinforced the validity of the ARB's proposal to reform the UK's architectural education and registration pathway. Later that month, the ARB held an online workshop for education providers to discuss the modernisation of architectural education.<sup>64</sup>

With 711 responses from registered architects, academics, other professionals working in the built environment, and students, the survey results confirmed widespread demand for reform to architecture education. 65% of all respondents agreed that the structure of education and training needed to change from the current approach of Parts 1, 2 and 3.

<sup>&</sup>lt;sup>62</sup> ARB (2021), p. 11

<sup>&</sup>lt;sup>63</sup> ARB (2021), p. 6

The cost and duration of a formal education in architecture at universities were also the subject of critique in short-answer responses, as well as the educational content of some courses and their suitability for the requirements of contemporary practice. Apprenticeship schemes and the removal of Part 1 as a registration requirement were widely endorsed.

"...OF COURSE this [the cost] is going to lead to a lack of diversity. How could someone who doesn't have the external financial support look at this and think "this looks like a good way to invest the next ten years of my life." <sup>65</sup>

The report also outlined concerns regarding exploitative working conditions, with many assistants describing systemic disadvantage and structural inequity within the current framework. Architectural assistants, particularly Part 1 graduates, often work in low-paid roles while being expected to gain professional experience. The survey also showed that "the current system disproportionately affects or counts against women, transgender or non-binary people, people from a minority ethnic group, or people from a lower socioeconomic background."

### Jul 2022

# A move away from the 'generalist architect' and market demands for specialised forms of practice

The widely acknowledged move toward more specialised and interdisciplinary forms of architectural expertise was, in part, propelled by the introduction of the Building Safety Act in **July 2022.** In response to the Grenfell Tower fire, and in anticipation of new fire and safety standards, the RIBA's new education framework—*The Way Ahead*—already placed a greater emphasis on health and life safety.

In a statement issued by the RIBA President, Alan Jones, titled "What does The Way Ahead mean for the profession and RIBA members?" Jones explained: "Advanced specialisms will be formally recognised under the new framework. This will include Principal Designer accreditation for the new, enhanced duty holder role set out in the notes to the draft Building Safety Bill. This will also acknowledge that beyond core competencies, the complexity and richness of our profession and industry encourage some to focus expertise in certain areas.<sup>67</sup>

Both the ARB discussion paper and report on *Modernising the IET of Architects* also identified the need for recognition of specialisms, interdisciplinary practice, and improved accessibility for architecture-adjacent professionals. The resulting demand for cross-disciplinary approaches to architecture education was also evident in the number of dual-accredited and unaccredited 'architecture-adjacent' programs at many of the schools visited.

46

<sup>65</sup> SQW (2021)

<sup>66</sup> ARB (2022), p. 4

<sup>&</sup>lt;sup>67</sup> Jones (2020)

University College Lond	ion I The Bartlett School of Architectu	ire
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
Engineering and Architectural Design MEng	Architectural and Interdisciplinary Studies BSc	Sustainable Built Environments, Energy and Resources BSc
		Sustainable Built Environments, Energy and Resources MEng
University of Cardiff   W	Velsh School of Architecture	
Dual accredited	Specialist Unaccredited	Sustainability-focused
n/a	Architectural Design MA	Sustainable Building Conservation MSc
	Environmental Design of Buildings MSc	Sustainable Mega Buildings MSc
The University of Sheffi	eld I Sheffield School of Architecture	
Dual accredited	Specialist Unaccredited	Sustainability-focused
Structural Engineering and Architecture MEng	Architectural Design MA	Sustainable Architecture Studies MSc
The University of Edinb	urgh I Edinburgh School of Architectu	ure and Landscape Architecture
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	Architectural Conservation MSc	Advanced Sustainable Design MSc
University of Dundee   I	Duncan Jordanstone College of Art and	l Design
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	n/a	Spatial Planning with Sustainable Urban Design MSc
		Environmental Sustainability MA
Glasgow School of Art		
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	n/a	Design Innovation and Circular Economy MDes
TU Dublin   School of A	architecture, Building and Environmen	t
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	Architectural Technology BSc	Sustainable Timber Technology BSc
	Master of Architectural Technology MSc	Sustainable Development MSc
	Building Performance (Energy Efficiency in Design) MSc	
University College Dubl	lin   School of Architecture, Planning a	nd Environmental Policy
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	n/a	Architecture, Urbanism and Climate Action MSc
Aalto University   School	ol of Arts, Design and Architecture	
Dual accredited	Specialist Unaccredited	Sustainability-focused unaccredited
n/a	n/a	Creative Sustainability MA (Art and Design)

Table 1. Dual-accredited and architecture-adjacent (unaccredited) programs at schools visited during Fellowship (as of 2024).

## Sep 2022 The first ARB Education Symposium

As part of its review of the IET of architects, the ARB held an Education Symposium in London to consult with educators, architects and representative bodies in **September 2022**. The symposium was the first ever in-person conference held by the ARB and was attended by over 60 educators and architects.<sup>68</sup>

The symposium was the final form of consultation before the release of *Tomorrow's Architects* in **February 2023**—the proposed new regulatory framework and the start of an open consultation period for the most significant reforms to the education and training of architects in the UK in over 50 years.

# Jan 2023 The RIBA's response to the ARB proposal

In **January 2023**, and in anticipation of the ARB release of its proposal for *Tomorrow's Architects*, the RIBA released an Education White Paper outlining its position on how to reform architectural education.<sup>69</sup>

The RIBA confirmed a similar position to that of the ARB, identifying that the duration, cost, and exclusive nature of architecture education were reducing diversity in the profession. The RIBA also called for shorter, more flexible study models, including apprenticeships, integrated five-year degrees, and registration upon graduation with structured practice, to make the profession more accessible and inclusive.

The paper proposed the need for a curriculum overhaul that would build alignment between the ARB's proposals and the six core *Themes and Values* outlined in *The Way Ahead*. The RIBA called on practices to support student learning and structured practical experience actively, but that an outcomesbased approach must come with sufficient guidance and structure from employers. The paper also argued that the current funding model was inequitable, stating that architectural education was underfunded relative to its costs and should be reclassified alongside STEM subjects to attract better government investment.

The two main areas of concern conveyed through the White Paper were the need for continued advocacy for fair Government funding for student fees for the 3+2 model, and to ensure university architecture courses were protected while opening alternative pathways. Second, the RIBA expressed concern about misaligned systems and core competencies for the profession between the RIBA and ARB frameworks.

Dialogue across the architecture sector between academia and practice is critical to ensure that academia addresses the

<sup>69</sup> RIBA (2023b)

<sup>&</sup>lt;sup>68</sup> ARB (2022a)

needs of practice and practice takes greater responsibility for the appropriate training of students.<sup>70</sup>

During my Churchill Fellowship interviews, it was clear that many architects couldn't understand why the ARB wasn't capitalising on the combined efforts of the RIBA, along with other groups (including ACAN, Architects Declare, and the Climate Framework), to align its frameworks with the themes and values already developed for the profession in 'The Way Ahead' in **September 2020**.

The RIBA Validation system is widely recognised and highly regarded, with over 140 practice and education experts involved, and is therefore best placed to be both recognised by the ARB and positively integrated into the new ARB process as a vital asset.<sup>71</sup>

#### Feb 2023

# "Violent agreement" during the ARB consultation period

In **February 2023**, the ARB published its proposals for a new regulatory framework and launched a three-month consultation period for *Tomorrow's Architects*. The new framework proposed removing the requirement to complete an accredited Part 1 qualification (undergraduate or Bachelor's), opening pathways to Part 2 apprenticeships and registration via industry routes. From 2028, the ARB would only accredit Master's level qualifications, and an undergraduate qualification would not be required for registration as an architect in the UK.

"During the consultation period, there was a lot of debate and argument that I describe as violent agreement. Everyone seemed to agree that things need to change."

Fellowship interview quote

### Mar 2023

# The RIBA responds with an education reform policy note

Once the ARB's open consultation period had commenced for *Tomorrow's Architects*, the RIBA clarified its position on the "huge value" of a Part 1 qualification in an education reform policy note, developed in **March 2023** and released in **April 2023**.<sup>72</sup>

In the policy note, the RIBA argued for at least 600 credits of academic study to maintain international 'portability' for UK students and to protect public

<sup>&</sup>lt;sup>70</sup> RIBA (2023a), p. 1

<sup>&</sup>lt;sup>71</sup> RIBA (2023b), p. 4

<sup>&</sup>lt;sup>72</sup> RIBA (2023a)

funding models for higher education. Instead of removing Part 1 of a 3+2 model, the RIBA presented the option for a five-year integrated education and practice award, which would lead to the award of title as an architect at the point of graduation.

The RIBA also emphasised that inconsistency between ARB prescription and RIBA validation criteria was a burden on education and training providers.

Dialogue across the architecture sector between academia and practice is critical to ensure that academia addresses the needs of practice and practice takes greater responsibility for the appropriate training of students.<sup>73</sup>

In a follow-up media release later that month in **April 2023**, Dr Jenny Russell, Director of Education and Learning for the RIBA stated that, while the profession welcomes an accessible register, including via apprenticeship routes, that, "by declaring the removal of the internationally respected Parts 1, 2, and 3 (co-held with and introduced by RIBA), ARB is undermining our education system". Arguing that other regulated professions, such as structural and civil engineering, enable graduates to practice under their titles upon graduation, "we suggest that architecture students too should be able to call themselves an architect on graduation".<sup>74</sup>

## May 2023 The ARB consultation period closes

The ARB consultation period for *Tomorrow's Architects* closed in **May 2023**. I completed my Churchill Fellowship interviews in the period between the consultation period's close and the approval of the new competencies in **September 2023**, along with the release of an analysis report on the consultation process.<sup>75</sup>

There was a tone of exhaustion and a sense that people were 'talked out' on the issue. Many critiqued the ARB's new general criteria and outcomes-based graduate attributes, noting that climate was presented as something to provide "protection against" with no mention of embodied or operational carbon costs.

<sup>75</sup> ARB (2023a)

<sup>&</sup>lt;sup>73</sup> RIBA (2023a), p. 1

<sup>&</sup>lt;sup>74</sup> Russell (2023)

### **Sep 2023**

# The ARB approves competencies for "Tomorrow's Architects"

In **September 2023**, the ARB announced its approval of competencies for *Tomorrow's Architects* and released an analysis report on the consultation process that had been undertaken.<sup>76</sup>

The new ARB regulatory framework for education removed the requirement for accreditation of undergraduate degrees (Part 1). This means that aspiring architects in the UK could now enter Part 2 studies (i.e. Master's) from a variety of undergraduate degree backgrounds, or via an apprenticeship pathway.

The changes open a variety of pathways for *Tomorrow's Architects*, reinforcing hybrid education models that combine university studies with work placements as a recognised part of an architect's formal training. The education and training pendulum has swung from:

- 1. The historic 'master-apprentice' model, through to,
- 2. The university education system has been the dominant pathway since the mid-20<sup>th</sup> century, and now,
- 3. Settled into a 'middle ground' where students have multiple pathway options to gain access to the profession in the UK.

# **Summary**

# "Tomorrow's Architects": the UK Architects Registration Board education review

As a statutory body within a government department, the ARB oversees the UK's mandatory Register of Architects and adopted a more conservative approach to climate action demands.

The ARB's *Tomorrow's Architects* proposal sought to modernise the initial training and education of architects and introduce alternative pathways into the profession. The reforms aimed to help the profession adapt to contemporary challenges, including climate change.

The education review underpinning *Tomorrow's Architects* was informed by extensive data analysis, an independent review, collaborative research with academics via SCOSA, and three years of stakeholder consultation.

Resistance to *Tomorrow's Architects* arose from the absence of explicitly stated climate literacy competencies, concerns about the effect of apprenticeship pathways on universities, the maintenance of education quality, and poor alignment with RIBA's degree validation requirements.

Students and recent graduates were generally more supportive of the *Tomorrow's Architects* proposals than experienced practitioners.

# Funding wins: architecture education research to build climate literacy

### Nov 2018

### TU Dublin initiates a climate-focused curriculum review

The Technological University Dublin in Ireland (TU Dublin) responded almost immediately to the international climate action movement that was forming around Greta Thunberg's Fridays for Future school strikes, propelled by the IPCC *Special Report on 1.5 °C of Global Warming*, 77 and amplified by the formation of XR and the London Parliament Square climate protests.

Having initiated the first stages of a curriculum review process with a commonsense approach to climate literacy in **November 2018**, academic staff at TU Dublin were already mobilising in parallel to the formation of ACAN and Architects Declare.

The project initiated a philosophical shift away from traditional linear program development toward an interconnected and transparent circular model of interaction, characterised by feedback loops, to enable students and academics to engage with climate change in architectural education directly.<sup>78</sup>



Figure 13. Technological University Dublin. Photo: Author from Churchill Fellowship.

<sup>77</sup> IPCC (2018)

<sup>&</sup>lt;sup>78</sup> Boyer (2022), p. 2

### **Apr 2019**

## Architectural Design for Climate Change pilot project

By **April 2019**, TU Dublin launched its *Architectural Design for Climate Change* pilot project, intended to embed sustainability and climate literacy as a central component of undergraduate architecture education.

The Architectural Design for Climate Change project was timed to respond to a confluence of internal and external factors and leverage the potential for collaborative and large-scale engagement to generate curriculum change.<sup>79</sup>

In May 2019, a four-hour *Architectural Design for Climate Change* workshop was held with more than 300 participants, including students, academic staff, and external industry and community representatives. The project focused on embedding the Sustainable Development Goals as a cross-cutting lens through which global sustainability could be applied as an integrated framework.

#### Jun 2019

### **Architecture Education Declares**

In early **June 2019**, a group of students from the Architectural Association, Bartlett, Cass, Central Saint Martins, Kingston University, Royal College of Art, Sheffield University, and Westminster University established *Architecture Education Declares*. The open letter came before the Royal Institute of British Architects' (RIBA) declaration of a climate emergency later that month, and just after the launch of the UK Architects Declare movement in **May 2019**. The declaration quickly gathered thousands of signatures from academics and architecture schools worldwide.

The student declaration took the form of an open letter, which emphasised the critical role of architecture education in addressing the ecological crisis. The letter argued that the discipline of architecture shapes environments and influences social and political systems, but that current approaches to education did not adequately address the ecological and political implications of practice. <sup>80</sup>

The letter encouraged commitment to building climate action working groups within schools, to petition the RIBA and the ARB to centralise the climate crisis and professional ethics in their certification practices, and to collaborate across schools to jointly oversee collective efforts.

The online platform has since been removed, with reference to the declaration still available across various websites and architectural media.

<sup>80</sup> Architecture Education Declares (2019)

54

<sup>&</sup>lt;sup>79</sup> Boyer (2022), p. 10

### **Sep 2019**

# A new university term commences at TU Dublin with a focus on climate literacy

As a new term commenced in **September 2019**, the Bachelor of Architecture programme team, along with all 300 students and external stakeholders, gathered to launch the start of the new academic year. The event platformed new design studio modules and briefs that had been developed during the May workshop. It included a video of the Architectural Design for Climate Change workshop to foreground the collective mission that had been established.

Early in the semester, the agenda was solidified with a week-long 'Climate Camp'— a design competition with teams collaborating as vertical year-group cohorts in **October 2019**.<sup>81</sup> The camp was a week-long competition for all undergraduate students, who were invited to participate in a "Climate Project Challenge" in vertical (mixed-year) studio groups. The design studio was identified as the signature pedagogy of architectural education and a prime location for integrated learning about climate literacy.

The initiative, initially led by then Head of School Jennifer Boyer, evolved to become the *Resilient Design Curricula* project. The project was subsequently rebranded as the *Building Change* project and would ultimately result in collective curriculum reform across all Irish schools of architecture (see later).

### **Sep 2020**

## **ARCH4CHANGE** project commences

After successfully leading an Erasmus+ bid for €300,000 in funding through the United Nations Erasmus+ program from 2020 to 2023,<sup>82</sup> as well as other sources, Sofie Pelsmakers officially commenced the ARCH4CHANGE project in **September 2020**.

The project aimed to address the skills and competency gap between the knowledge of students and educators and what is required in practice to meet climate goals. Through an open-source, digital climate curriculum—including a teacher training toolkit—ARCH4CHANGE was conceived to enable integrated learning through a structured, yet flexible curriculum framework for architecture education.<sup>83</sup>

<sup>81</sup> Boyer (2022)

<sup>82</sup> Erasmus+ (2020)

<sup>83</sup> European Commission (2020)

# **ARCH4-CHANGE**

Figure 14. ARCH4CHANGE logo

The project team spanned five European countries and universities, including:

- Tampere University, Finland
- University of Bologna, Italy
- Aarhus School of Architecture, Denmark
- Tallinn University of Technology, Estonia
- Technological University Dublin, Ireland

### May 2021

## ARCH4CHANGE sustainability in education survey

In May 2021, the research group surveyed staff and students across its constituent five architecture schools to understand 419 students' perceptions on sustainable design principles, preferences regarding resources and identification of barriers to learning. 113 academic staff responded to similar questions with a focus on the development and refining of a Teacher Toolkit.

#### Jun 2021

# ARCH4CHANGE intensive training session hosted by TU Dublin, Ireland

In **June 2021**, a five-day teacher training intensive was hosted by TU Dublin for the co-creation and refinement of the ARCH4CHANGE toolkit framework. Project partners evaluated and applied aspects of the Teaching Toolkit that had been co-developed in the earlier stages. The workshop revealed that co-creation and teaching case studies needed to be a core component of the would be at the core of the Teaching Toolkit.<sup>84</sup>

#### Feb 2022

# Irish Government Human Capital Initiative

Following the independent curriculum review undertaken at TU Dublin in 2019, Jennifer Boyer led a successful bid for €3,900,000 in funding from the national government's Higher Education Authority *Human Capital Initiative* (HEA-HCI), which aims to "increase capacity in higher education to provide skills-focused programmes designed to meet priority skills needs". 85 From **February 2022**, all six schools of architecture in Ireland began utilising this HEI-HCI funding to launch the *Resilient Design Curricula* project, which would go on to become the *Building Change* project. 86

<sup>84</sup> Pelsmakers & De la Rosa (2023), p. 17

<sup>85</sup> HEA (n.d.)

<sup>86</sup> HEA-HCI (2023)

"When there was money, all the resistance suddenly fell away."

### Fellowship interview quote

The HEA-HCI is a government initiative that recognises the need for a dynamic stimulus mechanism for climate change education in architecture that is adaptive to the needs of individual schools in Ireland.





Figure 15. Irish Government Higher Education Academy and Human Capital Initiative logos

Where ARCH4CHANGE aimed to produce an online, open-source curriculum as the main deliverable, Building Change took the approach to build human capital by strengthening and documenting curriculum review processes across the country, "educating educators," and buying out time to invest in staff training. A key component of this project was recognition that expecting educators to participate in teacher training on top of a regular workload was not feasible.

### Apr 2022

## **Building Change project launch**

The Building Change project was officially launched in **April 2022** by the Minister for Education, joined by over 500 attendees from architecture schools in Ireland. In **May 2022**, a workshop was held with all six schools of architecture in Carlow.



Designing A Resilient Future Through Architecture Education

Figure 16. Building Change logo and marketing material

The Building Change project demonstrates how integrated climate literacy can be embedded across an entire architectural curriculum through collaborative redesign, educator up-skilling, and partner engagement. Building Change also shows how impact in a university setting can extend beyond the academy into industry, continuing professional development, and inform professional standards.

### Dec 2022 Development of a new national Irish standard

The Royal Institute of the Architects of Ireland (RIAI), which serves as both the peak industry body and regulatory authority, began collaborating with the Building Change project in **December 2022** to establish a new national standard for architecture education. This process involved coordination across Ireland's six schools of architecture.

# Mar 2023 ARCH4CHANGE Aarhus workshop

In March 2023, a five-day intensive event was held in Denmark, including all consortium partners and students, to test the ARCH4CHANGE curriculum and beta version of the digital platform.

### Aug 2023 Launch of ARCH4CHANGE in Helsinki and Tallinn

with over 100 short video lectures, readings, a case study library, and a teacher training toolkit. It presents a holistic perspective on sustainability issues impacting climate change with content structured according to 10 design themes with content that is sortable and searchable: (1) Future and global responsibility, (2) Infrastructure, (3) Environment, (4) Passive resilience, (5) Energy and CO2, (6) Materials, (7) Health and wellbeing, (8) People and community, (9) Delight, and (10) Performance.

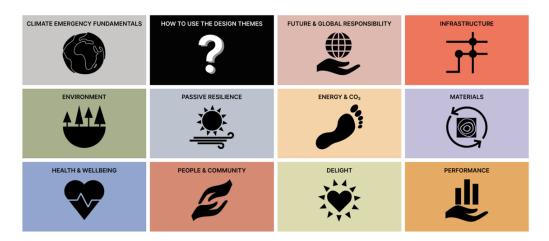


Figure 17. ARCH4CHANGE ten design themes.

The ARH4CHANGE resource is unique because it encourages students to question the values underpinning a project before making design decisions. Which means the curriculum goes beyond technocratic approaches to climate literacy and sustainability. Energy and carbon, building performance, and materiality are presented alongside social and ecological themes and are emphasised equally. Learners are encouraged to question their knowledge, skills, and values through the design process.

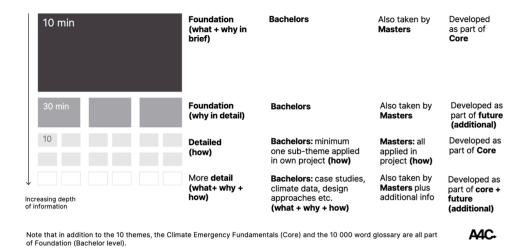


Figure 18. Indicative map of the ARCH4CHANGE curriculum, demonstrating incremental scaffolding of themes and integrations of themes across a five-year program.<sup>87</sup>



Figure 19. ARCH4CHANGE launches Design Museo, Helsinki. Photo: Author from Churchill Fellowship.

<sup>&</sup>lt;sup>87</sup> Pelsmakers & De la Rosa (2023), p. 11

# **Summary**

### Funding wins: architecture education research to build climate literacy

Climate activism in architecture generated research focused on embedding climate literacy into curricula and teacher training.

Climate change and sustainability cannot be effectively taught as isolated or elective subjects. Building climate literacy requires a whole-of-curriculum approach.

Successful integration of climate literacy in architecture education depends on cultural buy-in and a school-wide approach to curriculum design, including dedicated teacher training.

Substantial additional funding and resources are urgently required to modernise architecture education in line with evolving industry demands. These reforms cannot be achieved within existing academic workloads.

Without proper resourcing, academic staff leading these changes face resistance and are often sidelined, as their efforts are perceived as unwelcome or problematic.

# Climate justice: connecting climate action to the just transitions movement

#### Oct 2019

# The formation of the UK Section of Architectural Workers Union (SAW)

In **October 2019**, the UK Section of Architectural Workers Union (SAW) formed as a grassroots trade union section within the broader UK union United Voices of the World (UVW). It was founded by architectural workers, including students, graduates, architects, assistants, and technicians who were frustrated with poor working conditions, unpaid overtime, a culture of overwork, low pay, a lack of diversity, and weak protections in architectural workplaces.

#### **Dec 2019**

### The RIBA Future Architects Network is established

In **December 2019**, the Future Architects Network was founded to strengthen the relationship and connections between the Royal Institute of British Architects (RIBA) and emerging professionals in architecture. Reference its formation, there was no coordinated support or networking structure for early-career architects within the Institute, unlike similar networks in other professional bodies, for example, the Emerging Architects and Graduate Network (EmAGN) and Student Organised Network of Architects (SONA) in Australia. The original vision for the Future Architects Network was for "an entrepreneurial, regionally devolved, financially independent network", where the model has evolved to be more of a centralised member services initiative that includes student mentoring, RIBA Professional Experience and Development Record (PEDR) guidance, and wellbeing support.

### Nov 2020

### The Future Architects Front—FAF—forms

Concerns about exploitation, economic pressures and workers' rights in the architectural profession collided in late 2020 as Charlie Edmonds and Prithi Mohandas formed the Future Architects Front (FAF). As students completing their master's degrees in architecture and urban design at the University of Cambridge, the group's name, Future Architects *Front*, was coined in protest regarding the RIBA's Future Architects Network, which they felt had failed in its objective to empower early-career RIBA members.<sup>90</sup>

<sup>88</sup> RIBA (n.d.)

<sup>89</sup> Shtebunaev et al. (2024), p. 5

<sup>90</sup> Shtebunaev et al., (2024)



Figure 20. Future Architects Front logo

While the Future Architects Network had led to a significant increase in RIBA student members, the network lost its dedicated budget and full-time coordinator during an internal restructure in **early 2021**. 91

A key frustration about the Future Architects Network was that it tended to position early-career professionals simply as *students*, ignoring the complex issues they face during the transition into practice. Emerging architects were concerned that the initiative lacked sustained support for members post-chartership.

#### Jan 2021

# FAF open letter to RIBA on workers' rights

In **January 2021**, the newly formed FAF issued an open letter to the RIBA calling for an end to the longstanding "culture of exploitation" surrounding employment of Part 1 (undergraduate) and Part 2 (postgraduate) students. The letter included information gathered from a survey run through Edmonds' private Instagram account, which attracted responses from 166 architectural assistants. This account went on to become the leading platform for the FAF. 93

The FAF open letter, co-authored by founders Edmonds and Mohandas, gathered over 1800 signatures in less than four weeks. The open letter included an appendix with 100 quotes outlining personal accounts of worker exploitation in architectural practice.<sup>94</sup>

<sup>91</sup> Shtebunaev et al., (2024)

<sup>&</sup>lt;sup>92</sup> Jessel, (2021)

<sup>&</sup>lt;sup>93</sup> FAF, (n.d.)

<sup>&</sup>lt;sup>94</sup> Jones, (2021)

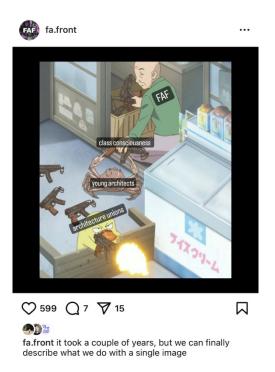


Figure 21. Future Architects Front, Instagram post, 1 Oct 2023.

The result was what has been referred to as a "snowball effect" in which the FAF became a kind of "container" for the letter, spurring an online movement with over 15k followers on Instagram. <sup>95</sup> This Instagram page has formed a platform for ongoing campaigning for workers' rights in the profession.

# Architects connect climate change with cultural injustice

In **September 2020**, the European State of the Union Address announced the launch of the *New European Bauhaus (NEB)*, to be adopted as part of the European Green Deal. The stated aim of the NEB was to ensure that beautiful, sustainable, and inclusive places, products and ways of living are preserved as Europe transitions to become the first net-zero continent by 2050. By November 2020, the Architects Council of Europe (ACE) had joined the New European Bauhaus Collective, releasing the statement *Making the Renovation Wave a Cultural Project* to express initial views on the New European Bauhaus and offer its support to the Commission. The initiative also served to centre retrofit as a key issue in sustainability transitions across Europe.

The call to action is from artists and cultural voices worldwide who are urging climate negotiators at COP UN Climate Conferences to prioritise cultural heritage, the arts, and creative industries in climate action efforts. They are advocating for a 'Joint Work Decision on Culture and Climate Action,' a UN initiative to create policies that fully integrate culture into climate solutions.

A focus on cultural issues as interconnected with climate action is similarly evident in the work of the International Union of Architects (UIA), which is a

<sup>&</sup>lt;sup>95</sup> At the time of publication.

founding signatory to the Climate Heritage Network's Global Call to Action to Put Cultural Heritage, Arts and Creative Sectors at the Heart of Climate Action. 96 The UIA recognises that despite the global influence of cultural conditions, cultural issues remain underrepresented in climate policy. Through the Climate Heritage Network, the UIA advocates for culture-led solutions, rooted in inclusivity and locality. The aim is to foreground cultural heritage and creative industries like architecture, design, music, fashion, and film to influence lifestyles and consumption choices. The call to action is to leverage the cultural sector's potential to envision and achieve low-carbon, just, and climate-resilient futures.

In **November 2021**, Architects Declare added a 12<sup>th</sup> principle, "climate justice", through the launch of its Practice Guide at COP26, reinforcing the need to "support those who are working for climate justice and strive to ensure equity and an improved quality of life for all".<sup>97</sup> ACAN's early emphasis on education had also grown to include "cultural transformation" as one of its three overarching aims, with the group stating:

We call for a complete remodelling of our professional culture. We must challenge and redefine the value systems at the heart of our industry and education system. We seek to create an open network to share resources and knowledge to aid in this transition.<sup>98</sup>

## A spotlight on justice in architecture education

Due to growing attention on structural inequality and power imbalances in the profession, architecture education had also become a focus of social justice concerns. Following a strong collective focus on climate literacy in architecture education throughout 2019 and 2020, the return to in-person learning after the COVID-19 lockdowns amplified a new set of frustrations about the quality of education, giving rise to concerns that student well-being was being overlooked.

The focus on architecture education was underscored by growing anticipation surrounding a review of the ARB's regulatory framework for educating and training architects. As students and graduates pushed for better representation and access to the profession via the RIBA, the extent of the generational divide was illuminated by early research commissioned by the ARB as part of its review of education and training frameworks for the profession. The SQW *Review of Architects' Competencies* report, released in **February 2021**, revealed that questions were being raised about routes to qualification, the quality of work placements for aspiring architects, and the length of time to registration. Specifically, the amount of time spent in higher education was seen to hinder participation in the profession, increase study cost pressures,

64

<sup>96</sup> UIA (2023)

<sup>97</sup> Architects Declare (2021), p. 12)

<sup>98</sup> ACAN (n.d.-a)

and negatively impact student well-being. Where most architects surveyed felt that the amount of time taken for new architects to become registered in the UK was 'about right' architects who had qualified most recently were more likely to state that they thought the route to registration was too long. <sup>99</sup>

The demand for education and training reform was further reinforced by results from multiple subsequent architecture education surveys conducted through the ARB review. Additional surveys conducted by the FAF, Architects Journal, and the ARCH4CHANGE project throughout **May and June 2021** confirmed widespread dissatisfaction with architecture education. Across the UK and other parts of Europe, the FAF received 532 responses, ARCH4CHANGE 500+ responses, and the Architects Journal ~400 responses.

The ARCH4CHANGE project was grounded in the idea of "radical inclusivity", promoting democratic and collaborative approaches to learning that fundamentally challenge mainstream methods in architecture education. This ethos was reinforced by objectives to share an open-access curriculum, build capacity across institutions, and provide a teacher toolkit to empower educators.

Recovery from the impacts of COVID-19 presented a complicating factor for architecture schools. While many educators gained a form of professional development through the efforts of ACAN during the lockdowns, many academics and university administrators had gone into survival mode during COVID-19. Managing the complexities of online delivery and the pastoral care requirements of student cohorts living through a global crisis presented a heavy workload, with many academics also homeschooling their own children during this time. The collective burnout and exhaustion of teaching staff and students was barely acknowledged, with teaching staff expected to hit the ground running on return to in-person classes in **September 2021**.

... everything is different [since Covid]. It's so exhausting just looking after the students.

Fellowship interview quote

In the time since learning returned to this new normal, there has been the additional challenge of staff movement, as well as student cohorts who spent significant portions of their architectural education experience without crucial peer-to-peer learning opportunities and manual skill development. This is having a lasting effect on schools as staff recover from widespread burnout while addressing skills deficits in student cohorts.

<sup>&</sup>lt;sup>99</sup> SQW (2021), p. 32 <sup>100</sup> Hall (2021)

#### Jun 2021

## FAF architectural education survey results released

In **June 2021,** FAF reported on results from 532 respondents to an online survey using nine Instagram tiles to illustrate how concerns about architecture education connected to social justice, wellbeing, access to the profession and affordability of training.

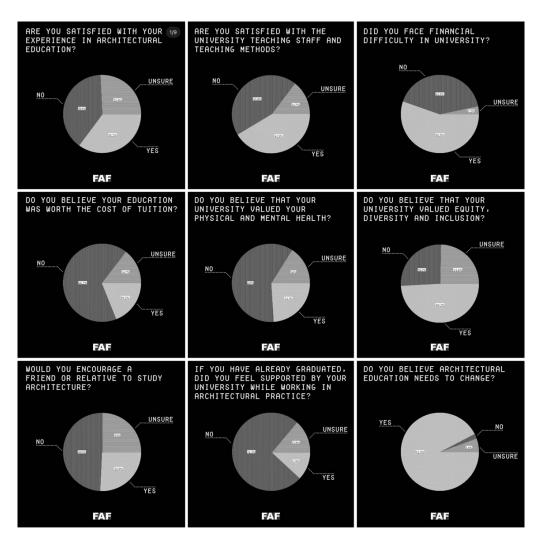


Figure 22. Future Architects Front architecture education survey results. 101

At the same time as the growing scrutiny of architecture education, recent graduates, having recently completed their studies, were also entering into pressured workplaces and were becoming frustrated by widespread exploitation in the profession. These sentiments, combined with dissatisfaction with the RIBA's response to the FAF open letter, were fuelling a collective sense of disillusionment and anger among students and graduates.

<sup>&</sup>lt;sup>101</sup> FAF (2021)

#### Mar 2022

## FAF call to action for the RIBA presidency

Unsatisfied by the RIBA's response to their open letter in **January 2021**, <sup>102</sup> the influence of the Future Architects Front via its Instagram platform was growing. Students and graduates were beginning to express frustration about what they described as a historically fraught relationship between the RIBA and its emerging professionals, including the lack of coordinated support and networking through RIBA membership. They had welcomed the formation of RIBA's Future Architects Network in 2019, which had reportedly been scaled back, resulting in the loss of a dedicated budget and full-time coordinator in 2021. <sup>103</sup> At the same time, COVID-19 restrictions were easing, enabling better connections and planning for collective action through in-person events.



Figure 23. FAF Instagram post about worker exploitation, 22 Feb 2022

Apathy is the biggest pain point. Hostility is easier to overcome than apathy.

Fellowship interview quote

<sup>&</sup>lt;sup>102</sup> Jessel (2021)

<sup>103</sup> Shtebunaev et al. (2024)

Having lost faith in traditional industry lobbying, some members of ACAN and the Union Section of Architectural Workers (SAW) joined with the FAF to form an informal WhatsApp group. Following a series of online meetings, and a year after the FAF had issued its open letter to the RIBA, the FAF announced a "call to action" having agreed to a process for a RIBA presidential campaign in **March 2022**. <sup>104</sup> The campaign was supported by the UK Section of Architectural Workers Union (SAW), ACAN, Failed Architecture online magazine, the Architecture Lobby London, and Break Line.

The call to action asserted that the next RIBA president needed to be representative of its members and that it was "time for the first worker at the helm". The FAF stated:

We need a president who is not afraid to join in with trade unions to protect our rights. We need a president who will challenge practices that do not follow their own climate and labour pledges. A president who will attend ACAN and UVW-SAW meetings, not as a guest, but as a committed activist. 105

# Turbulence across the profession and the risk of burnout

"People were starting to burn out, realising they were doing these things on top of a working day"

Fellowship interview quotes

The COVID-19 recession, followed by Brexit, created significant economic uncertainty for developers, which was compounded by the **April 2022** approval of the Building Safety Act. In **August 2022**, the denial of planning approval for M&S further unsettled developers. Since **February 2022**, the Ukraine conflict had been disrupting material supply chains, adding to industry pressures.

By February 2023, calls to modernise the profession and make education more accessible were growing, highlighted during the ARB consultation that concluded in May 2023. Earlier, in April 2022, the RIBA joined five other professional membership bodies in signing a Memorandum of Understanding to advance Equality, Diversity and Inclusion in the built environment. However, youth-led campaigns argued that change was not progressing quickly enough despite the initiative.

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<sup>&</sup>lt;sup>104</sup> FAF (2022) <sup>105</sup> FAF (2022) p. 1

"I'm struggling with hope right now."

"Everyone is really tired."

Fellowship interview quotes

Protection of title without protection of function makes for lean business models in the profession. Those interviewed observed that architectural firms often lack the available resources to adopt new technologies, train staff, and build internal capacity. As a result, practices are struggling to remain competitive in an industry that increasingly depends on innovation and adaptability.

Practitioners commented on the use of embodied carbon calculations and energy use modelling, which have the potential for providing architects with valuable metrics to quantify the benefits of good design. However, these are most often seen as specialist skills that fall outside the traditional expertise of architectural practices, leading them to outsource this work to consultants. This reliance on specialists was mentioned as limiting the development of inhouse sustainability knowledge.

Further, an observed "glass ceiling" for Sustainability Leads in architectural practice was noticed. Climate change is exposing the structural barriers that prevent the profession from effectively responding to rapidly changing market forces, which sustainability leads are tasked with navigating.

"There's a glass ceiling for Sustainability Leads—they're being set up to fail if they are just hired to make a firm look like they're doing something [about climate change] ... and you know what else? They're often women."

Fellowship interview quote

# Apr 2022 FAF announce worker presidential nominees

Having agreed to a process for engagement with the RIBA presidential election, the FAF network also worked to familiarise itself with the RIBA's official election rules. In April 2022, the FAF announced four "architectural worker" candidates for its RIBA presential campaign.

"RIBA said they would do things and never did."

Fellowship interview quote

The campaign to identify a nominee was launched with a call in the Architects Journal and on social media. The FAF was calling for nominations from early-career architects, which resulted in four possible candidates, including Hannah Deacon, Henry Pelly, Benjamin Champion and Muyiwa Oki. Following independent hustings—publicly supported by former RIBA presidents Ben

Derbyshire and Alan Jones—an online poll led to the selection of Muyiwa Oki as the chosen presidential nominee. <sup>106</sup>

### May 2022

# Muyiwa Oki chosen by FAF to challenge for RIBA presidency

In **May 2022**, once 60 signatures had been collected from RIBA Chartered Members to nominate a candidate, the FAF announced that Muyiwa Oki had been chosen to challenge for the RIBA presidency. As a salaried architect at global construction company, Mace, the campaigners that were backing Oki were seeking to shake up the RIBA and "usher in a new era of change". <sup>107</sup>

It was widely recognised that the campaign momentum had been generated due to criticism from early-career architects and assistants who were experiencing a culture of exploitation in architectural workplaces.

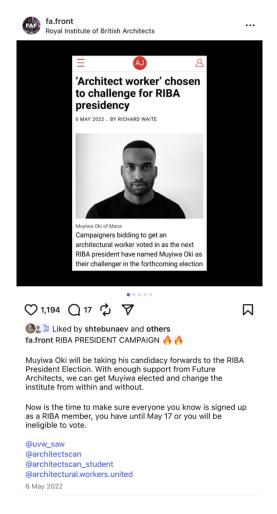


Figure 24. FAF Instagram post, 6 May 2022.

<sup>&</sup>lt;sup>106</sup> Shtebunaev et al. (2024), p. 7)

<sup>&</sup>lt;sup>107</sup> Waite (2022a)

### June 2022

### **RIBA** presidential race 2022

On 20 **June 2022**, the RIBA announced its three presidential candidates: Jo Bacon, Sumita Singha, and Muyiwa Oki. <sup>108</sup> The demand for diverse and progressive leadership for the RIBA was evident in positions of all three presential candidates.



Figure 25. Right to left: Sumita Singha, Muyiwa Oki, and Jo Bacon. 109

Sumita Singha, OBE, ran as an experienced RIBA board member responsible for education, and founder of Architects for Change and member of the climate action group advising the RIBA council. As Director of Ecologic Architects, Sumita had dedicated decades of work teaching, practising and writing on the environment, equity and ethics.

Sumita's campaign reflected a comprehensive commitment to challenging old colonial ways of thinking and showing how diversity and inclusion are key to building creativity and fairness in the profession. Sumita also promised to lobby for chartered practice status to include mandatory environmental and carbon targets and encourage these practices to work on net-zero and retrofit projects. In her campaign, Singha stated:

Because of our colonial past, we think that European culture is superior to other cultures, so we need to really be thinking globally in education. <sup>110</sup>

Jo Bacon, managing partner at Allies & Morrison, also worked at the RIBA as a councillor and board member for the RIBA, responsible for culture and events. Her campaign promises included CPD on climate change and a focus on RIBA's 2030 climate challenge, including targets for practices on reducing embodied and operational emissions in their projects. As an active supporter

<sup>108</sup> RIBA (2022)

<sup>&</sup>lt;sup>109</sup> Ing (2022b)

<sup>&</sup>lt;sup>110</sup> Lowe (2022b)

of women in architecture, Bacon convincingly positioned her business smarts and commitment to ensuring the RIBA continued to address its financial issues and bring the institution's operations under budgetary control. In her campaign, Bacon stated:

Now's not the time to flip-flop about with changes of direction ... We need to keep going with the very good stuff that's happening. And it's essential to the life of the RIBA as a sustainable institute.<sup>111</sup>

The strength of Oki's campaign lay in his ability to engage his constituency. His promotion of more flexible routes into the profession aligned with what was being proposed through the ARB's education framework review, and in seeking to redirect the profession's focus away from "starchitects", he captured the imagination of the next generation of architects. In his campaign, Oki stated:

I want to speak up for the future of architects and to steward bold institutional reform, galvanise the architectural profession and incorporate the energy and voice of unrepresented members ... The profession is currently in service to the wealthy, the privileged, and the well-connected. 112

The Oki campaign faced initial challenges in ensuring that worker architects would engage with the election process, including a late rule change from the RIBA to stop the influx of new members from voting unless they had joined by mid-May 2022.<sup>113</sup>

<sup>&</sup>lt;sup>111</sup> Lowe (2022c)

<sup>&</sup>lt;sup>112</sup> Lowe (2022a)

<sup>&</sup>lt;sup>113</sup> Ing (2022a)



Figure 26. FAF Instagram post, 5 May 2022

Of particular focus for the campaign were 'hustings', in which candidates in an election present their views and answer questions. RIBA campaigns were allowable from the point of submission to the close of the poll, but hustings and election meetings were restricted and could only be held once the poll had opened. This meant that the official hustings facilitated by RIBA presented a challenge in that the members that the FAF were seeking to connect with through the election process were likely to be among the most disengaged constituents.<sup>114</sup>

#### SAW Town Hall: 'Architectural Workers Take Action'

Also in **June 2022**, before the official RIBA hustings, the UK Section of Architectural Workers Union (SAW) held a Town Hall, which included a series of panels and presentations. The event included representation from the FAF, Dank Lloyd Wright, and others to discuss online activism in the built environment, from memes to campaigns, consciousness-raising, and protests.

At the event, Afterparti and ACAN discussed how the architecture industry can tackle the climate crisis while respecting and preserving the diverse communities in the UK. Douglas Spencer and Architectural Workers United joined from the US to discuss the new wave of activism there and solidarity between disciplines and countries.

<sup>114</sup> Oki (2022)

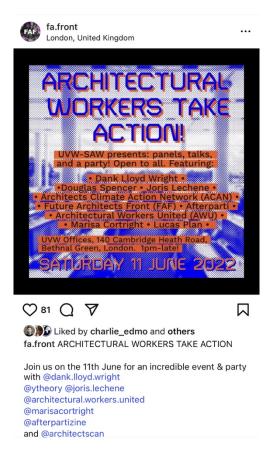


Figure 27. FAF Instagram post, "Architectural workers take action", 3 June 2022.

#### RIBA hustings and polling period opens

Three RIBA hustings (debates) were held between the three presidential candidates online on the 21<sup>st</sup>, 23<sup>rd</sup> and 27<sup>th</sup> **June 2022**. Voting opened for four weeks.

#### **ARB Modernising IET: Analysis Report**

In **June 2022**, the results of the ARB survey on modernising the initial education and training of architects were published in the form of an analysis report. The report provided further evidence of the generational divide that was driving the FAF's RIBA presidential campaign, revealing that 62 per cent of students agreed that an outcomes-based approach and flexible pathways into the profession would help to achieve the vision of a more modern education. In contrast, 66 per cent of academics or architectural academics disagreed. While 94 per cent of students agreed that the structure of education and training needed to change, only 55 per cent of architects did.

<sup>&</sup>lt;sup>115</sup> ARB (2022b), p. 6

Respondents also raised concerns about working conditions, mistreatment, and that the current system disproportionately affects or counts against women, transgender or non-binary people, people from a minority ethnic group, or people from a lower socio-economic background. 116

The ARB was highlighting demand for a diversified profession, both in terms of who could access architecture education and training, and via which routes. This opening of the profession would require access to both non-academic routes via apprenticeships and university pathways into the profession. Among other changes, this involved removing a 'prescribed' or 'accredited' Part 1 (undergraduate) qualification, much like the Australian model.

#### Aug 2022 Oki wins RIBA presidential election

After four weeks of active campaigning, 'architect worker' Muyiwa Okie was announced the winner of the RIBA presidential election in **August 2022**, having gained 40.7 per cent of votes, closely followed by Jo Bacon with 38.4 per cent of votes. <sup>117</sup> The youth-led movement that led to Muyiwa Oki's election was founded on ecological and social justice, "signified a break with a centuries-old status quo". <sup>118</sup>



Figure 28. FAF Instagram post, 2 Aug 2022

<sup>&</sup>lt;sup>116</sup> ARB (2022b), p. 4

<sup>&</sup>lt;sup>117</sup> Waite (2022b)

<sup>118</sup> Shtebunaev et al. (2024)

In a 2024 follow-up paper led by Simeon Shtebunaev and co-authored by Muyiwa Oki, Charlie Edmonds, founder of the FAF, and others, the group reflects on "the nitty gritty of running a campaign". The article outlines key practical lessons:

- 1. Find your tribe.
- 2. Know the rules.
- 3. Organise flexibly and pool resources.
- 4. Maintain strong principles.
- 5. You need the press.
- 6. Activate your networks.
- 7. Keep your friends close and your institute closer.
- 8. Be prepared to play dirty.

The stated lessons learned—two years after the formation of the FAF and Muyiwa Oki's successful election campaign—show that the shift from disillusionment to adversarial action has been sustained.

#### May 2023 Just Transitions Lobby formed

In the 12 months between Muyiwa Oki's election win and the commencement of his presidential term, preparation began. The consortium of groups that drove the campaign formed the Just Transitions Lobby in **May 2023**, which included members also involved in ACAN, the FAF, and the SAW union. As an informal, cross-institutional network, the campaign group was established to reform professional membership bodies.

Its founding principles were:

- 1. The RIBA must leverage its position and resources towards radical climate action in and beyond the built environment.
- 2. The RIBA must endeavour to advance the material and cultural conditions of architectural workers.
- 3. The RIBA must incorporate equity, diversity, inclusion, and accessibility as foundational values in all aspects of their work.



1.
The RIBA must leverage its position and resources towards radical climate action in and beyond the built environment.

- a. End economic greenwashing: the RIBA must acknowledge the fundamental economic failings of the past century and reject the myth of perpetual growth.
- b. Reject 'business as usual': the RIBA must advocate for radical legislative action and openly critique ineffective reform<u>ism</u>.
- c. Architects are fossil fuel workers: the RIBA must work towards an economy that facilitates regenerative architectural practice; from retrofit to low-embodied-carbon construction.

FOUNDING

PRINCIPLES

2.
The RIBA
must
endeavour
to advance
the material
and cultural
conditions of
architectural
workers.

- a. End unpaid overtime and overwork: the RIBA must address the professions' dependence on exploitation in order to improve working conditions, practice fees, and professional standards for all.
- b. Institutional advocacy for workers' rights: the RIBA must support workers, who make up the majority of its membership, to improve the institute's relevance to the profession, increase membership, and expand its political influence.
- c. Work with grassroots organisations: the RIBA must acknowledge the limitations of centralised institutions and support those working on the frontlines of social and ecological crises.

The RIBA must incorporate Equity, Diversity, Inclusion, and Accessibility as foundational values in all aspects of their work.

- a. No more empty gestures: the RIBA must devolve power to address the intersectional, postcolonial and regional inequities it currently exacerbates.
- b. EDIA is political and spatial: the RIBA must pursue EDIA through a societal and decolonial lens introducing policies with intent to influence both institutional and political economic conditions.
- c. Accessibility is a choice: participation in the RIBA and wider profession result from choices that have been made and can be remade differently. The institutemustregularlyinterrogate data on who enters, remains, and thrives in the profession in order to achieve effective standards of accessibility.

Figure 29. Just Transitions Lobby "Founding Principles"

#### **Sep 2023**

### Oki commences RIBA presidency as the ARB approves new, more inclusive education framework

Muyiwa Oki commenced his two-year presidency from **September 2023**, at the same time as this Fellowship was being conducted. The same month, the ARB released the analysis report for its *Tomorrow's Architects* consultation and approved a new, more inclusive education framework following two-and-a-half years of stakeholder engagement.

"The current education system has created significant barriers to some people becoming architects at all. We have heard that the cost of education and the requirements for work experience create barriers for people from less affluent backgrounds or without existing networks in the profession. This could disproportionately impact those from poorer backgrounds and minority groups." 119 120

The ARB's reforms marked a pivotal moment in redefining architectural education and access to the profession in the UK. The *Tomorrow's Architects* analysis report exposed deep generational and structural divides within architecture, with students calling for flexible, outcomes-based pathways while many senior academics and practitioners defended established models. Alongside concerns about inequality, discrimination, and exclusion, the report set in motion a vision for the future of the profession with diverse routes into architecture.

The parallel rise of the youth-led activist movement that culminated in Muyiwa Oki's RIBA presidency reinforced the demand for transformation. The alignment between the ARB's inclusive education framework and the Just Transitions Lobby's principles of equity, diversity, and climate action signalled a cultural shift in the profession.

Oki's campaign also reflected a new kind of professional engagement through online activism and social media. Much of the momentum behind his success mirrored the wider surge of climate action across the UK since 2019, fuelled by Instagram, Zoom meetups, and WhatsApp networks. These digital platforms enabled younger architects and students to connect, collaborate, and mobilise faster and more effectively than ever before. Instagram became the visual hub for promoting events and campaigns, while collective organising through WhatsApp created open, inclusive spaces for sharing knowledge and opportunities.

Together, these developments signalled a redefinition of architectural politics and the promise of cultural transformation in education and practice.

<sup>&</sup>lt;sup>119</sup> ARB (2021), p.3

<sup>&</sup>lt;sup>120</sup> UK Government (2023)

### Summary

#### Climate justice: connecting climate activism to the just transitions movement

As architectural climate activism encountered political and structural barriers, the movement expanded to address broader issues of injustice and inequality.

Climate activism in architecture carries a high risk of volunteer burnout. Many participants contribute outside of paid work hours, sacrificing rest and leisure. Climate action groups also exhibit a gender imbalance, with greater female representation.

Lean business models, limited resources for capacity building, and the absence of protection of function are creating structural barriers to climate action in architecture.

The Future Architects Front (FAF) provided a platform for groups including ACAN and the UK section of the Architectural Workers Union (SAW) to campaign collectively for the election of Muyiwa Oki as the first Black, salaried worker, and youngest president in RIBA's history.

The youth-driven nature of the climate action movement, frustration over future architects' limited representation within RIBA, and the exploitative conditions of pathways to registration have contributed to a growing generational divide within the profession.

## Report Findings

1 Architects expanded their focus beyond the profession and engaged with external events and movements to drive climate action.

To generate climate action, architects first connected to what was happening beyond the profession. This was catalysed by the Global Climate Strikes, followed by declarations of a climate emergency across the built environment sector. Momentum outside architecture helped sustain climate action in the profession.

#### For example:

- Global School Strikes, Parliament Square and Waterloo Bridge protests staged in London staged by the Extinction Rebellion (XR).
- Cross-Industry Action Group and Climate Framework developed in consultation with stakeholders across the built environment sector and academia.
- New European Bauhaus policy and funding initiative through the European Union in alignment with the Green Deal.
- Engagement through Edinburgh Fringe Festival, Futurebuild, Retrofit Reimagined, COP26 in Glasgow.
- Retrofit First, Circular Economy, Just Transitions, Shade the UK, Part Z/ Regulate Embodied Carbon, Just Stop Oil, Insulate Britain, Extinction Rebellion.
- Architects built local networks and communities of practice, which generated a sense of agency, community and solidarity through climate action.

Local networks fostered collective agency among architects, sustained by a calendar of regular online and in-person events. These groups were able to connect at national and international levels, helping to counter climate anxiety through shared purpose and knowledge exchange.

#### For example:

- Architects Climate Action Network (ACAN), starting in London and expanding into an international network with multiple thematic working groups.
- The Architects Declare a Climate and Biodiversity Emergency in the UK and subsequent international movement.
- Anthropocene Architecture School events and engagement with school of architecture.
- Scottish Ecological Design Association (SEDA) events and community.
- Student Climate Action Groups forming in schools of architecture and ACAN forming its Students Climate Action Network (StuCAN).

## Architects used data-informed research to advocate for structural and institutional change and to strengthen climate literacy.

Changes to education and training frameworks, together with curriculum reform, have been informed by research and strengthened by reporting from volunteer initiatives and activist groups. Progress has been further enabled through shared climate and material data and proximity between major centres.

#### For example:

- UK Architects Registration Board (ARB) commissioned SQW to conduct survey, focus groups and desktop review and accompanying 2021 Review of Architects Competencies report.
- Commonwealth Association of Architects 2020 Survey of the Build Environment Professions: Planning for Climate Change and Rapid Urbanisation.
- Collaborative Climate Literacy Skills Survey and accompanying 2021 RIBA Skills Mapping Survey report co-authored by ACAN, Cross-Industry Action Group, Standing Conference of Schools of Architecture (SCOSA), and Royal Institute of British Architects (RIBA).
- ARCH4CHANGE 2021 survey of 500 architecture students on sustainability in education.
- Future Architects Front 2021 Architectural Education Survey.
- Architects' Journal 2021 Architectural Education Survey.
- ARB 2021 Modernising the Initial Education and Training of Architects report.
- Climate Framework 2022 Climate Education: The State of the Industry report.
- ARB 2023 Consultation Report: Analysis report on ARB's consultation on education and training reforms.

## Architects collaborated to through climate literacy research and to develop resources between different groups and organisations.

Climate action in the architectural profession has been strengthened through sustained collaboration among diverse volunteer groups, industry organisations, professional bodies, and academic institutions.

#### For example:

- Architects Climate Action Network (ACAN) Climate Curriculum Campaign and open access resources.
- Coauthored material between ACAN, Architects Declare, SCOSA, and Royal Institute of British Architects (RIBA).
- Anthropocene Architecture School open access resource library.
- Cross-Industry Action Group and *Climate Framework* developed in consultation with stakeholders across the built environment sector and academia.
- RIBA review of its education and training framework, including adopting the *Climate Framework* as a *RIBA Climate Literacy Knowledge Schedule*.
- TU Dublin curriculum review, leading into Resilient Design Curricula and Building Change project across all Irish schools of architecture.
- ARCH4CHANGE online curriculum and teacher toolkit.
- Standing Conference of Schools of Architecture (SCOSA) Climate Literacy Working Group.
- Scottish Ecological Design Association (SEDA) multidisciplinary network across practice, research and universities.

# Architecture schools have been given dedicated resourcing and support to keep pace with industry transformations driven by climate change.

Public funding, institutional support, and industry engagement have been essential for schools of architecture to embed climate literacy across the curriculum and to train educators. Without these supports, efforts often remain superficial, limited to optional or 'add-on' subjects.

#### For example:

 Royal Institute of British Architects (RIBA) and UK Architects Registration Board (ARB) recognise their responsibility to support architecture schools to meet new competencies when education and training frameworks are reviewed.

- EU Erasmus+ funding for ARCH4CHANGE as a holistic, values-based, open access curriculum and teacher training toolkit.
- Irish Government funding for the Building Change project, in which all six architecture schools collaboratively developed resources and conducted teacher training.
- Climate Framework as a common curriculum, adopted by RIBA as a Climate Literacy Knowledge Schedule and published as a book: RIBA Climate Guide.
- ARCH4CHANGE online climate curriculum and teacher training resources, with accompanying book published by RIBA: Designing for the Climate Emergency: A Guide for Architecture Students.
- Application of Building Change outcomes as CPD material and engagement with the Royal Institute of the Architects of Ireland (RIAI) for a new national standard for architecture education.
- ARB and RIBA engagement with the Standing Conference of Schools of Architecture (SCOSA) in reviewing education and training frameworks.
- Architecture schools supported by external stakeholders to deliver live projects and industry incubator studios through architecture schools.

# Architects have been protesting the cultural barriers that prevent change in the profession, demanding structural reform to education and practice.

As climate action has matured to encompass just transitions, architects are turning their attention to the culture of exclusivity in the profession. Demands for more inclusive architectural education and training, and rejection of traditional elitism is seen as a necessary step toward transformative change in practice.

#### For example:

- Students in architecture schools are forming climate action groups and demanding an education in architecture acknowledges climate change and prioritises learning that prepares them for a career in a climate crisis.
- Volunteer initiatives and climate action groups are building well-being and justice into their activities to ensure psychologically safe, inclusive spaces.
- Future Architects Front (FAF) open letter to the Royal Institute of British Architects (RIBA) protesting student and graduate worker conditions.
- Election of the first salaried, Black, youngest RIBA President, Muyiwa Oki.
- Architects Registration Board (ARB) consultation and reformed education framework for more inclusive and accessible pathways to registration.
- Development of alternative pedagogical approaches and teacher training to appropriately acknowledge the psychosocial impact of climate change.

# 7 Architects in influential positions, practices, professional bodies, and architecture schools endorsed and joined the climate action movement.

Collective endorsement from influential individuals and organisations provided grassroots climate activists with the validation needed to recognise their agency. This support was crucial for translating voluntary initiatives into institutional change.

#### For example:

- The initial UK Architects Declare signatories were the 17 architects who had won the Stirling Prize, with hundreds of practices and architecture schools around the world following suit.
- Royal Institute of British Architects (RIBA) engagement with Architects Declare, ACAN, the Cross-Industry Working Group to progress climate action.
- RIBA awarded Scott McAulay a RIBAJ rising star award for his work through the Anthropocene Architecture School.
- UK Architects Registration Board (ARB) demonstrated lenience regarding Tom Bennett charge for climate protests.
- Standing Conference of Schools of Architecture (SCOSA) *Climate Literacy Working Group* and engagement with climate action groups.
- Architecture media sustained focus across multiple platforms on climate action and promotion of events and initiatives.
- EU endorsement through Erasmus+ funding for the ARCH4CHANGE project (€300,000).
- Irish government endorsement through Human Capital Initiative (HCI) funding for the Building Change project (€3,900,000).

## Architects interested in climate action have been moving away from traditional career paths to pursue new specialisations, and role types.

Climate literacy intersects design, technology, and theory in architectural education. In practice, architects are moving beyond generalist forms of practice to address climate and social justice issues. A variety of new advanced specialist roles are emerging as complex projects demand interdisciplinary expertise.

#### For example:

 Many emerging architects are learning about the carbon emissions of new construction and feel conflicted about participating in traditional forms of architectural practice.

- There is an increasing acknowledgement of advanced specialisms in architecture, for example, Principal Designer in the new Building Safety Act 2022.
- Unaccredited degree pathways are opening in architecture schools, for example: Architectural Science, Sustainable Architectural Studies, Creative Sustainability.
- Emerging practices are creating new governance systems and democratic modes of practice that resist business as usual.

# Architects involved in climate action are burning out from the extra commitment of voluntary initiatives and resistance to change at work.

The architectural profession has benefited from the collective efforts of voluntary climate action, campaigning and lobbying. However, those pressing for action in workplaces frequently encounter resistance and hostility, which is negatively impacting emerging architects and is causing a generational divide in the UK.

#### For example:

- Resources and material developed through ACAN, Architects Declare, the Anthropocene Architecture School, and the Cross-Industry Action Group, among others, have been the result of voluntary donated time.
- Academics in architecture schools without resourcing for curriculum review are relying on self-education to teach students about climate change.
- Sustainability leads in practices are sharing and connection through monthly meetings, using the 'Chatham House Rule' to protect commercially sensitive information.

## Conclusions

This Churchill Fellowship project aimed to connect global efforts for climate action and literacy across the architecture profession, revealing a compelling five-year story about international climate action in architecture. Interviews with 36 people across the profession leading climate action show that building climate literacy in architecture requires a combination of collective action, education reform, and cultural transformation.

Across the United Kingdom and Europe, architects have advanced climate action by reaching beyond the profession to connect with networks of practitioners, industry organisations, academics, students, and allied professions. In Australia, the same potential for transformation exists. The findings of a 2022 survey of the profession in Australia reveal a profession that is motivated and ready to act: 91 per cent of practitioners support regulatory reform for climate-responsive practice, and 93 per cent express concern about climate change and want to see more decisive professional action. 121

Yet despite a strong desire for action, Australian architects face barriers that mirror the early challenges seen overseas—fragmented advocacy, limited institutional support, and uneven access to education and data. International evidence shows that climate action gains momentum when architects connect their efforts across sectors and scales. Building coordinated networks between industry bodies, local initiatives, and universities can translate isolated projects into a shared national agenda. The profession is in desperate need of a national data and knowledge framework to underpin these efforts, ensuring that learning is collective and cumulative, not confined to individual practices or states.

It is education that will turn climate action into professional leadership. Overseas, dedicated funding and industry support have enabled architecture schools to embed climate literacy across their curricula, preparing graduates for transformative change to the nature of architectural practice in a changing climate. In Australia, both academics and practitioners express overwhelming support for similar reform—95 per cent of educators want more teaching about climate change, while 83 per cent of practitioners are pursuing self-education to fill existing gaps. This will require coordinated investment in education and continuing professional development to convert personal commitment into capacity-building across the profession.

However, education alone cannot drive change without a culture that supports it. The sustainability of climate action depends on cultural transformation—valuing diverse roles, safeguarding wellbeing, and preventing burnout among those leading change. Collective responsibility, rather than individual effort, must become the defining feature of architectural practice. Architects need leaders who champion open debate about the future of the profession and mentors to guide emerging architects through this period of rapid change.

The lessons learned from this Fellowship reveal that progress has been made where collective action, education reform, and cultural transformation reinforce one another. Australia can connect its local initiatives through national coordination, strengthen education through collaboration, and renew its professional culture around shared responsibility.

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<sup>&</sup>lt;sup>121</sup> Brogden et al. (2023)

## Dissemination and implementation to date

Dissemination of findings from this Churchill Fellowship has, so far, been conducted through:

- Posted findings on Instagram and LinkedIn during the Fellowship period, August 2023 to November 2023.
- Presented on project during the Churchill Fellowship period:
  - Sheffield School of Architecture.
  - Edinburgh School of Architecture and Landscape Architecture.
  - Mackintosh School of Architecture, Glasgow School of Art.
- Convened a peer review workshop of preliminary findings in Brisbane, December 2023.
- Presented preliminary findings to an international online audience, StuCAN! April 2024.
- Presented preliminary findings to a national online audience, 'Sustainability Snacks', Australian Institute of Architects, May 2024.
- Led a multistakeholder bid for a climate change-themed Association of Collegiate Schools of Architecture (ACSA) International Conference for Brisbane, to be hosted by QUT in 2026.
- Facilitated monthly climate action meetups for built environment practitioners in Brisbane, throughout 2024.
- Established the working group for a national online Climate Forum event in partnership with ACAN Australia, and Australian Architects Declare, September 2024.
- Tested preliminary findings through workshop facilitation with the National Board of Directors and National Council of the Australian Institute of Architects, November 2024.

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## **Appendix**

### **Climate Action Timeline**

REGULATORY AND GOVERNANCE	PROFESSIONAL Bodies	ARCHITECTURE EDUCATION	COLLECTIVE ACTION		
			Extinction Rebellion forms	OCT 2018	Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C
	Formal governance review of the RIBA constitution commences in 2018	First stages of curriculum review process at TU Dublin		NOV 2018	Parliament Square Climate Protests in London
				DEC 2018	
				JAN 2019	
				FEB 2019	
	·		Anthropocene Architecture School forms beginning with a library of resources	MAR 2019	First Global School Strike
		TU Dublin pilot stage project "Architectural Design for Climate Change" workshop	Architects Climate Action Network (ACAN) forms	APR 2019	Waterloo Bridge Protests week-long sit down protest Architect, Tom Bennett arrest
			UK Architects Declare a Climate and Biodiversity Emergency open letter ACAN meet-ups in pubs	MAY 2019	Scotland's Housing: More than just Numbers hosted by Scottish Ecological Design Association (SEDA) and Gaia Group
	RIBA declares a climate emergency	Architecture Education Declares open letter call for curriculum change	Anthropocene Architecture School launched at Architecture Fringe Festival in Glasgow	JUN 2019	Architecture Fringe Festival across Scotland
		Student Climate Action Groups begin to form around the UK		JUL 2019	
			Extinction Rebellion brings Ecological and Climate Emergency to Edinburgh Fringe Festival at Summerhall	AUG 2019	
				SEP 2019	

	AU TU	A/	AS workshop at Extinction Rebellion 'Rebel Rising Festival' Aberdeen	SEP 2019	
	modul foregro	les piloted new briefs ounding UN SDGs and climate literacy	ACAN first public event First in-person AD event 'The itecture of Emergency' at the Barbican		Largest UK and Ireland Climate Strikes
UK	RIBA 2030 Climate Challenge version 1 * The Bart Section of Architectural rkers (SAW) Union formed	lett Declares a climate emergency	ACAN Architects Public Assembly  AAS at RIAS National Convention  XR Modular U-Build 'Protest  Arcitecture', London	OCT 2019	RIBA Special General Meeting. Members voted in favour of a number of governance and restructure changes.
	schoo revie	ly uptake in some ols with curriculum w and reform prior IVID-19 lockdowns	Architects Declare Conference at Battersea Arts Centre AAS Crisis Studio 1 Glasgow	NOV 2019	Tom Bennett trial — guilty verdict
ARB clarifies that protesting is not prohibited under the Architects Code	RIBA Future Architects Network established LETI Net Zero One Pager		ACAN Open Letter to ARB re conviction of Tom Bennett	DEC 2019	
	Embodied Carbon Primer  ETI Clmate Emergency Design Guide		AAS Crisis Studio 2 Glasgow	JAN 2020	Brexit came into effect
			AAS Crisis Studio 3 Glasgow	FEB 2020	
			AAS Crisis Studio 4 Edinburgh	MAR 2020	Future Build 2020 "Moving towards a zero-carbon world
				APR 2020	First COVID-19 lockdown in UK
			Discussions and negotiation within ACAN about Climate Curriculum Campaign commence **	MAY 2020	100 days of climate webinars during lockdowns for architects, educators, students **
As (C) Url	nt report: Commonwealth ssociations of Architects AA): Planning for Climate Change and Rapid banisation: Survey of the Juilt Environment in the Commonwealth			JUN 2020	
			ACAN Educators Workshop 1: Climate Crisis ACAN Open Letter to Foster and Partners to withdraw from Amaala Airport Project or Architects Declare	JUL 2020	
ARB commissions SQW to undertake research into architects' competencies as precursor to 'Tomorrow's Architects' consultation	ustainability Lead roles began to emerge in large practices **		ACAN Educators Workshop 2: Brief Writing	AUG 2020	
provides almost €300,000 in	RIBA 'The Way Ahead' v European Bauhaus (NEB) ounced at EU State of the Union Address	H4CHANGE project commences	ACAN launch Climate Curriculum Campaign	SEP 2020	
* Indicated in RIBA 2030 Climate Chal	llenge vers <mark>io</mark> n 2, p. 4 ** App	roximate dates		OCT 2020	

	AJ Climate Champions podcast launches with Hattie Hartman		ACAN launch campaign in solidarity with AJ Retrofirst	OCT 2020	
	The NEB Collective releases Statement "Making the Renovation Wave a cultural project" with the Architects Council of Europe (ACE) as a key partner	ACAN Toolkit compiled as an interim solution as the ARCH4CHANGE curriculum was developed	ACAN Climate Education Toolkit launched FAF formed by Charlie Edmonds & Priti Mohandas	NOV 2020	
			Scott Macaulay of the Anthropocene Architecture School named one of RIBAJ Rising Star cohort	DEC 2020	Foster + Partners withdraw from Architects Declare Zaha Hadid withdraw from Architects Declare
	Future Architects Network lost its dedicated budget and a full-time co-ordinator during an internal organisational restructure of RIBA		Cross-Industry Action Group, Climate Framework launched Future Architects Front (FAF) open letter to RIBA	JAN 2021	Covid restrictions began easing
ARB publish SQW research			ACAN Regulate Embodied Carbon Campaign Launches	FEB 2021	Roadmap out of Covid Lockdown in UK announced
	RIBA 'Climate Literacy Knowledge Schedule' adapted from Climate Framework	RIBA Book: Energy / People / Buildings: Making sustainable architecture work Kimpian, Hartman, Pelsmakers StuCAN formed	ACAN Education Group and Climate Framework (CF) run climate literacy skills survey in collaboration with SCOSA	MAR 2021	
	RIBA supports ACAN/SCOSA climate literacy skills survey NEBC online conference: 'Making the Renovation Wave a Cultural Project'	SCOSA Sustainability and Climate Literacy Working Group shared report	ACAN + CF publish climate literacy skills report with SCOSA and RIBA AD "Ideas into Action" online two-day conference	APR 2021	
	LETI Defining and Aligning: Whole Life Carbon & Embodied Carbon published	ARCH4CHANGE survey on sustainability in architecture education  FAF Architectural Education Survey		MAY 2021	
	Toward COP26 event at Architecture Fringe Festival Including talk from Orla Murphy on New European Bauhaus	Architects Journal Architectural Education Survey ARCH4CHANGE Teacher Training Intensive at TU Dublin	Representation at Architecture Fringe Festival from ACAN, AAS, SEDA	JUN 2021	Architecture Fringe Festival 2021
	RIBA 2030 Climate Challenge version 2			JUL 2021	UK Covid Lockdowns lifted
				AUG 2021	
	RIBA and Architects Declare 'Built for the Environment Report'		RIBA and Architects Declare (AD) 'Built for the Environment Report'  ACAN and AD joint statement in support of the aims of	SEP 2021	Uni returns to regular in-person classes Insulate Britain forms
ARB publish discussion paper on modernising education model and release survey as the start of the Tomorrow's Architects' consultation	RIBA and Architects Declare Built Environment Summit LETI Climate Emergency Retrofit Guide		Insulate Britain  RIBA and Architects Declare Built Environment Summit  RIBA Practice Guide	OCT 2021	
			launched at COP26	NOV 2021	COP26 in Glasgow

				Architects Declare launch Practice Guide at COP26 ACAN and Anthropocene Architecture School presence	NOV 2021	COP26 in Glasgow
					DEC 2021	
					JAN 2022	
Irish Higher Education Authority HEI provides almost €3,900,000 for all six schools of architecture to build capacity in climate literacy through education		Building Chan announced be schools of arc Irelan	tween all 6 hitecture in		FEB 2022	Just Stop Oil went public
				FAF Call to Action and agreed process for a presidential campaign	MAR 2022	
RIBA joins with five built environment professional bodies to sign MOU on diveristy, equity and inclusion improvements	LETI and CISBE Net Zero FAQs published LETI Circular Economy One-Pager published	Project La Building Chang online by Minist Education w attendees fro school	e launched er for Higher ith 500+ m all Irish		APR 2022	Building Safety Act 2022 received Royal Assent
	Architects Declare, ACAN, RIBA Masterclass Series Masterclass 1: Climate Literacy	Building Chang in Carlow wit architecture	th all Irish	Muyiwa Oki chosen by FAF to challenge RIBA presidency Masterclass 1: Climate Literacy	MAY 2022	Architects Declare, ACAN, RIBA Masterclass Series
ARB publish analysis of Initial Education and Training (IET) Analysis Report	RIBA announces three presidential candidates RIBA Presidential Hustings Masterclass 2: Understanding Impact	RIBA Book: Desi Climate Emerge for Architectu Pelsmakers, Hoggard, Ko	ncy: A Guide re Students Donovan,	FAF, SAW ++ host action event for architectural workers Masterclass 2: Understanding Impact	JUN 2022	
	Masterclass 3: Working with the Client			Masterclass 3: Working with the Client	JUL 2022	Retrofit Reimagined, Civic Square, Birmingham
	Muyiwa Oki wins RIBA presidential election Maste <mark>rcl</mark> ass 4: Collaboration and Learning within Practice			Muyiwa Oki wins RIBA presidential election Masterclass 4: Collaboration and Learning within Practice	AUG 2022	Planning approval for Oxford St Marks & Spencers building denied
ARB Education Symposium held in London as part of the 'Tomorrow's Architects' consultation including educators, architects, and representative bodies.	Masterclass 5: Closing the Loop			Masterclass 5: Closing the Loop	SEP 2022	
					OCT 2022	
			<b>-</b>		NOV 2022	
					DEC 2022	

Work on a new national standard for architecture education commences in Ireland via the RIAI in collaboration with Building Change initiative	AD, ACAN, RIBA Practice Action - Assembly! Masterclass series finale in London, Edinburgh and online	AD, ACAN, RIBA Practice Action – Assembly! Climate Framework Report: Climate Education: the State of the Industry	DEC 2022
	RIBA Education White Paper		JAN 2023
	LETI Embodied Carbon Case		
	Studies published		
ARB 'Tomorrow's Architects' proposal for a new regulatory framework and consultation commences on education and training reforms.			FEB 2023
	Guide, Mina Hasman works includ and stu	HANGE five-day hop in Aarhus, ing academics dents to test the urriculum	MAR 2023
	RIBA Education Reform Policy Note re ARB Consultation		APR 2023
ARB 'Tomorrow's Architects' consultation period closes		Just Transitions Lobby campaign group formed	MAY 2023  UK Public Order Bill came into effect
		Open letter to the UK design media from UK Architects Declare, Design Declares and UK Interior Design Declares	JUN 2023
			JUL 2023
	ARCH4( Hels	CHANGE Launch inki / Tallinn	AUG 2023
ARB approves new competencies for 'Tomorrow's Architects' Analysis report on consultation released	President Oki Muyiwa begins RIBA presidency		SEP 2023