



ICED

Infrastructure & Cities for Economic Development

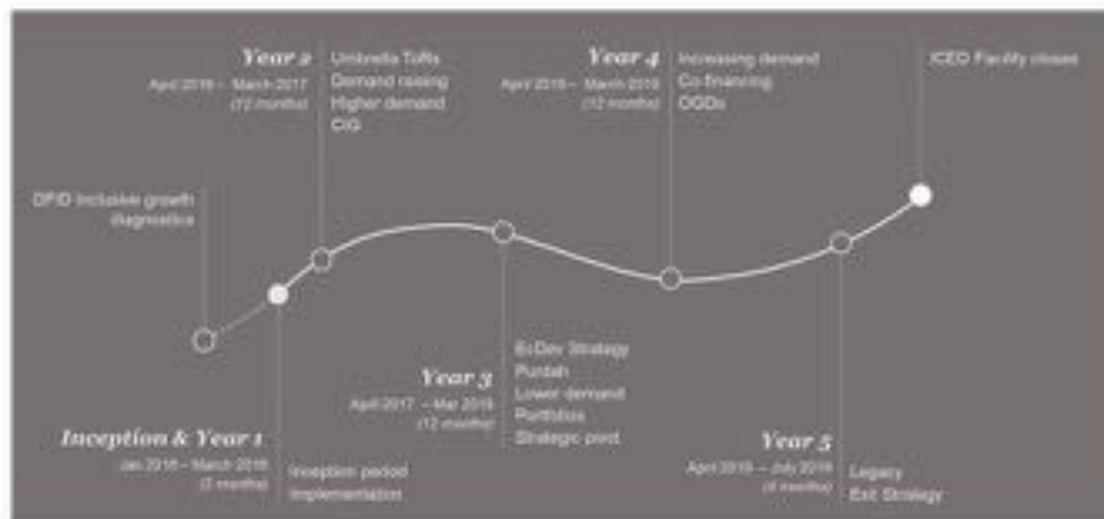
ICED Closure Event Summary Proceedings

17 July 2019



Introduction & Background

The ICED facility was a demand-led, flexible facility which supported DFID country offices, central teams and ODA-spending Other Government Departments to deliver DFID's Economic Development Strategy by scaling up programming and investment in infrastructure and cities. It operated between 1 February 2016 and 31 July 2019.



The ICED Facility was organised into six integrated portfolios, covering key themes within Urban and Infrastructure programming. These portfolios were:

- Infrastructure and Energy
- Urban
- Fragile and Conflict Affected States (FCAS)
- Gender, Disability, and Inclusion
- Climate and Environment
- Economic Development, Investment, and Jobs

The ICED Facility was managed by PwC and drew on expertise from an alliance which included Arup, Adam Smith International, Engineers Against Poverty, the International Institute for Environment and Development, MDY Legal and Social Development Direct.

As the ICED Facility draws to a close on 31 July 2019, the ICED Facility co-hosted a closure event with DFID on 17 July, which convened key stakeholders including DFID and ICED Facility management and technical teams and clients to discuss the Facility's outcomes, and key lessons learnt from its operation between 2016-2019. This document summarises the proceedings of the event.

Key Achievements

Business cases: The ICED Facility has supported the development of ten new business cases amounting to £902 million in new programming, of which £320 million is being delivered or in the process of procurement.

List of ICED Facility supported business cases developed (2016-2019)

1. Cities and Infrastructure for Growth (multi-country)
2. Sustainable Power and Energy for Economic Development in Sub-Saharan Africa (SPEED)¹
3. Rural Electrification in Sierra Leone Project
4. Increasing Access to Electricity in Sierra Leone
5. Sustainable Energy and Economic Development (SEED) Programme - Pakistan
6. India UK Partnership on Smart Cities for Inclusive Growth (SCIG)
7. Ethiopia WASH Programme
8. FCO Prosperity Fund China - Future Cities Programme
9. Gateway to Growth Programme (Africa and Asia)
10. Viability Gap Fund (global)

Scoping studies: The facility has also contributed to 41 scoping studies over four years to design new or redesign existing programmes.

Tools & Approaches: The ICED Facility has captured and disseminated tools and approaches developed as part of this work, which have been adopted by 30+ development programmes. These have included:

- Whole Systems Approach for Energy
- VfM programming for FCAS
- Digital innovation for the built environment
- Gender, Disability, and Inclusion mainstreaming framework and entry points for infrastructure and cities programming
- Climate and Environment mainstreaming framework and entry points for infrastructure and cities programming
- Disability inclusion in infrastructure
- Urban Handbook – guidance focusing on sub Saharan Africa helps advisors to design, implement and evaluate urban programmes.

Mainstreaming: Over the Facility's life, Gender & Inclusion, Climate & Environment, and Political Economy Analysis mainstreaming processes were developed and applied to 100% of ICED Facility supported work packages.

Knowledge and Learning: The ICED Facility has put into place an integrated approach to learning alongside delivery throughout its implementation. To support the dissemination of knowledge and learning, the ICED Facility has produced 140+ short, accessible 'two-pagers' drawn from the above products. These are hosted on the ICED website (www.icedfacility.org). The 'two-pagers' have been shared via multiple digital communications channels, including Medium, Twitter, and a quarterly ICED newsletter.

In line with DFID's preference for face to face learning, the Facility hosted over 40 learning events to convene DFID advisers both centrally and in country offices with ICED Teams, to feed learnings from work packages back into DFID.

To promote dialogue with external stakeholders, the Facility also hosted 12 roundtables, which addressed topical policy areas and key themes.

¹ The SPEED Business Case was not approved by Ministers due to an internal change in priorities.

Who has the ICED Facility worked with?

The ICED Facility has worked with 36 clients over its lifetime including DFID central teams, country offices, and OGDs. This includes 21 repeat clients for ICED support across the six ICED portfolios. Central teams have commissioned over 50% of deliverables

Key issues addressed by the ICED Facility

As part of the closure event, the ICED Facility technical team shared insights into five key thematic areas that the Facility has engaged with over the years, and attendees were invited to respond and offer comments. Below is a summary of key discussion points.

	The problem	ICED Facility contribution	Future opportunities
Effective Urbanisation	<p>2.5 billion more urban residents are expected by 2050; 90% of whom will be in Africa and Asia. However, knowledge is inadequate and ineffectively deployed to understand this new urban paradigm. Various regional disparities exist and need to be better understood. Approaches to urbanisation have been sectoral and siloed, whereas a new way of integrated working is required.</p>	<p>Taking key themes and adapting to an Urban context. e.g. Urbanisation in a Digital World, Urban (Community) Finance, Pakistan Housing.</p> <p>Helping look at what and why of urban programming, but also the how e.g. the urban handbook - which focuses on sub Saharan Africa helps advisors to design, implement and evaluate urban programmes.</p> <p>Worked examples, or the practice of urban programming. e.g. support to business cases such as Cities and Infrastructure for Growth (CIG), Dodoma Pre-Scoping Study, Pakistan Economic Corridors Programme and support to the FCO for the Prosperity Fund's Future Cities programme in China.</p>	<p>Future opportunities include collaborating and partnering across sectoral silos to develop thought leadership and financial models; developing tools and capacity to understand and enable more effective engagement in urban issues; and targeting 2nd & 3rd tier cities to maximise impact.</p>

	The problem	ICED Facility contribution	Future opportunities
Climate Crisis	<p>There is a limited carbon budget to limit temperature increases. Looking at emissions of infrastructure already built, and emissions of all infrastructure commissioned, we're already past 1.5°C. Therefore, there is a need to focus on adaptation, since</p>	<p>The ICED Facility has increased awareness on how to integrate (mainstream) climate change into DFID programming, e.g. by doing an ICF review of DFID's MENA portfolio and CIG scoping in seven countries.</p> <p>It has provided knowledge on the</p>	<p>Expanding the entry points and toolkit for climate finance interventions.</p> <p>Ensuring financial flows of aid are aligned with the objectives of the Paris Agreement, including making sure finance not earmarked for climate initiatives is also in alignment and contributing to tackling Climate Change;</p>

	<p>current emissions on track for 3-3.3°C of warming, which is associated to 1.7 billion suffering heat stress and crop yield changes, primarily in Africa and Asia.</p>	<p>economics and efficacy of different climate solutions and identified key information and data sources relevant to non-climate specialists to help them tackle this issue.</p>	<p>The need to split adaptation from mitigation more intentionally, and greater account of the differences in objective – and hence instruments and institutions – between adaptation and mitigation. This involves recognising that adaptation is all about mainstreaming, while mitigation is fundamentally transforming energy and agriculture systems - which cannot be done through ‘tweaks’ here and there.</p>
--	--	--	---

	The problem	ICED Facility contribution	Future opportunities
Inclusive Infrastructure & Cities	<p>The Gender gap presents a missed opportunity: closing this gap could increase global GDP by 3.9% by 2025, largely felt in developing countries where gap is greatest. Low rates of employment and participation by people with disabilities cost the global economy an estimated \$2 trillion, disproportionately more in LICs/MICs.</p> <p>1 out of 3 women experience violence in their lifetime, which is undermining economic growth.</p> <p>Poorly planned urban and infrastructure contributes to these factors.</p> <p>Growing urbanisation can be beneficial but can also exacerbate patterns driving violence against women and girls, and present other constraints to vulnerable groups.</p>	<p>The ICED Facility has contributed to the bridging of the gap between DFID’s infrastructure, private sector development, and social development cadres through its mainstreaming approach.</p> <p>This has included the development of an approach and practical entry points to integrate gender, disability and inclusion into infrastructure and urban programming. Examples include CIG scoping in seven countries, paper on Infrastructure and Women’s Economic Empowerment (WEE) to the UN High Level Panel on WEE and tailored support to the Private Infrastructure Development Group on gender mainstreaming. The ICED Facility has also supported stand-alone work on priority areas, including disability, and safeguarding. This has been bolstered by DFID’s own momentum and awareness around these issues.</p>	<p>Building in incentives into gender, disability and inclusion mainstreaming with different stakeholders at different levels. Often this involves focusing on the business case rather than relying solely on the moral argument.</p> <p>The need for gender, disability and inclusion expertise and understanding at each stage of programme design and implementation to optimise infrastructure and urban delivery.</p>

Programming in FCAS	The problem	ICED Facility contribution	Future opportunities
	Infrastructure programming in FCAS faces challenges around understanding the scale, nature, and trajectories out of fragility and conflict.	The ICED Facility has approached these questions by integrating the analysis of infrastructure in FCAS with political economy and security aspects, the people dimensions and the technical challenges of infrastructure in FCAS contexts. One key flagship product has been, for example, the 'Value for Money in infrastructure' set of tools developed for FCAS countries.	Future programming support needs to continue being context specific in order to be sustainable and effective.

Meeting the Financing Gap	The problem	ICED Facility contribution	Future opportunities
	There is an estimated \$18trn - \$57trn global infrastructure financing gap. Whilst there is plenty of potential available capital (including from public capital, DFIs and institutional investors) a lack of bankable projects persist. There is a need for the right kind of capital to build the infrastructure project pipeline and mitigate barriers to public and private investment into the bankable infrastructure projects that do exist.	<p>As such, the ICED Facility's support has focused less on increasing donor capital, and more on matching the right kinds of capital to specific constraints. This has involved providing support to close the gap between what investors are looking for in order to deploy their capital and what infrastructure project opportunities offer</p> <p>Examples include:</p> <ul style="list-style-type: none"> (a) Review of all HMG's 'devcap' vehicles (b) Design and approach of a new Viability Gap Fund (c) Opportunities for blended finance in (d) Mainstreaming investor perspectives in infrastructure and cities programming. 	Future opportunities in LMIC contexts should focus on specific country- and sector- level barriers In LIC and FCAS contexts, programming should explore using financing mechanisms to absorb risks and entice the private sector to invest. Donor agencies vs. DFIs have an important role to play at the bottom of the capital stack. New capital deployed should have a clear and differentiated mandate.

What worked - Thematic issues and lessons

The need for strong public institutions: Whilst the focus on private sector involvement and PPPs is welcome, the need for building strong public institutions that can make best use of incoming infrastructure investment is essential.

Efficiencies in capital: As well as mobilising capital, attention should be given to issues such as corruption, which can be linked to the built environment. Illicit financial flows is not something the ICED Facility has worked on directly, but is part of DFID's agenda with regard to infrastructure and cities programming.

Making use of the increasing availability of technology and data: Technological innovation and the Fourth Industrial Revolution (4IR) are creating new industries, disrupting existing ones and transforming the way things are made, delivered and operated. Application of emerging technologies for city and infrastructure development, such as artificial intelligence (AI), drones, blockchain, robotics, virtual/augmented reality (VR/AR), and 3D printing - together with continual advances in energy systems and low carbon infrastructure - bring new opportunities for sustainable and inclusive development.

International influencing: Though international influencing has not remained a core focus of the ICED Facility, there were some key areas that ICED did support DFID's international influencing activities, such as the UN High Level Panel on WEE, and the Live City Hack at Habitat III.

Climate & Environment: An issue that is likely to be resurgent in focus – support on what alignment with Paris Agreement for non-climate finance would be welcome.

Innovative use of donor capital to buy down eventual cost of infrastructure: a lot of opportunities for this in social sectors to reduce end user cost and increase access, even in PPP models.

Other areas the ICED Facility would like to have worked more on: Technology and opportunities to leapfrog, many more opportunities in infrastructure and urban planning that could be explored; and secondly, jobs in construction and technology, and where jobs will be in the future.

What worked - Process issues and lessons

Despite being in its last month of implementation, the ICED Facility is busier than ever to meet demand for technical support to new business case design, scoping studies and learning events from a range of DFID and OGD clients. In fact, Year 5 has seen the highest demand for support from the ICED Facility, since its inception.

The following summarises DFID and the ICED Facility's joint presentation of what has worked to stimulate this demand:

Responding effectively as a demand led facility: The ICED Facility has been able to balance between leading and following demand: management can focus when demand becomes clear, but for this, prioritising relationship building and partnerships has been an important focus for the Facility.

Reputation and relationships: Reputation and relationships take time to build up, for which, branding and consistency of personnel are key. It took until Year 2 to 3 until the ICED Facility was well recognised and acknowledged.

The ICED Alliance: The ICED Facility has delivered over 180 technical assistance requests, resulting in over 475 deliverables – through an Alliance of seven different organisations. It took time to build up to this, and there was virtue in being able to come from different organisations with separate, specialist expertise.

The need for strong ownership for the Facility from DFID: a certain amount of heavy lifting needed to be done by counterparts within DFID to help promote and build trust for ICED Facility amongst wider DFID colleagues.

The ICED Facility's integrated (unsiloed) approach has been effective: The ICED Facility was set up to be multi-sectoral and unsiloed. Despite having portfolios, it was often hard to decide what portfolio each work package sits within. Convening of different perspectives and ideas has been beneficial.

International Influencing works best when led by DFID: International influencing did not remain as central to ICED Facility activities as intended, particularly because of the practicalities of external consultants engaging other organisations on DFID's behalf. But background analytical work done by ICED Facility, such as desk research and statistics, has helped DFID engage with their partners externally.

Ensuring knowledge and learning are embedded: The ICED Facility has paid careful attention to making sure products do not sit on a shelf, and make work done practical and useful to DFID. General lessons have been extracted out where possible to help inform other programmes and in other circumstances. In particular, the development of tools for wider application and building a credible evidence base related to infrastructure and cities programming have been important to build credibility.

Flexibility and rapidity are important to establish value: The ICED Facility was originally intended to mainly support business case design, but its scope became broader during implementation. At least half of what the Facility undertook was not anticipated at inception or as part of the original business case. The Facility has had to respond to demand flexibly and then build flexible yet robust ways of working and processes in to its interlinking portfolio structure. This flexibility is key to the DNA of the ICED Facility and a key factor in its success. A practical example is the 10-day rapid call-down support instrument, which has had high uptake. Another example of the ICED Facility's ability to adapt has been to extend the Facility's offer to OGDs, helping to bridge skills and experience that DFID has to other departments across HMG less familiar with ODA programming.

The ICED Facility's Legacy

Following the close of the ICED Facility on 31 July 2019, there are two ways to continue accessing the vast body of work and knowledge on urban and infrastructure programming developed by the Facility.

The ICED Facility Website (www.icedfacility.org): Showcases publications for the wider public good, such as reports and summative '2-pagers' of ICED's work. The ICED Facility website will transition to 'archive mode' with no additional updates but it will continue to be hosted for a further two years to July 2021.

The ICED Facility Compendium: The Compendium is an annotated guide to the ICED Facility's deliverables. Chapters are organised according to the 15 fifteen work areas where ICED's contribution has been greatest.

The Compendium includes some 200+ curated reports, guides, and tools. It will be stored on DFID's internal Infrastructure Cadre site from August 2019. In addition, the full library of 475+ ICED Facility deliverables and ToRs will be available internally to DFID on the vault from August 2019.

Annex - full slide deck from the ICED Facility Closure Event



ICED

Infrastructure & Cities for Economic Development

ICED Facility Closure Event
17 July 2019



Welcome & Introduction

ICED Facility Closure Event



ICED Facility: Key outcomes 2016 - 2019 (10 mins)

A conversation on the ICED Facility's big issues (65 mins)

To discuss the global trends, DFID and HMG work in this space, and to see how the ICED Facility has been part of this story



Effective urbanisation



Climate crisis



Inclusive infrastructure & cities



Programming in FCAS



Meeting the financing gap

The ICED Facility & DFID (15 mins)

More than a sum of its parts: What have we learned

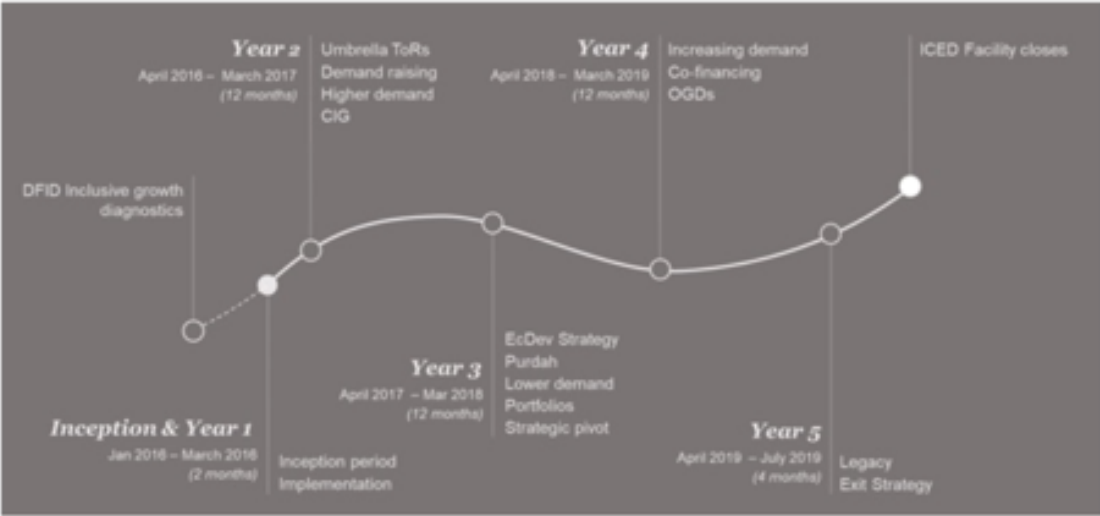
The ICED Facility legacy & closing remarks (10 mins)

Discussion over drinks & nibbles

The ICED Facility



ICED Facility Timeline



ICED Facility: Key Outcomes 2016 - 2019

Business cases supported by the ICED Facility



10 new business cases amounting to **£902 million** in new programming, of which **£320 million** is being delivered or in the process of procurement.

41 scoping studies over 4 years to design new or redesign existing programmes.

Name of business case
1. Cities and Infrastructure for Growth (multi-country)
2. Sustainable Power and Energy for Economic Development in Sub-Saharan Africa
3. Rural Electrification in Sierra Leone Project
4. Increasing Access to Electricity in Sierra Leone
5. Sustainable Energy and Economic Development (SEED) Programme - Pakistan - 1
6. India UK Partnership on Smart Cities for Inclusive Growth (SCIG)
7. Ethiopia WASH Programme
8. FCO Prosperity Fund China - Future Cities Programme
9. Gateway to Growth Programme (Africa)
10. Viability Gap Fund (global)



Other Outcomes

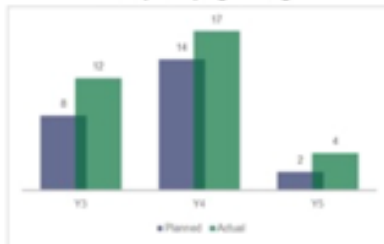


ICED Tools and Approaches

ICED tools and approaches have been adopted by **30+ development programmes**, including:

- Whole Systems Approach for Energy
- VM programming for FCAS
- Digital innovation for the built environment
- G&I and C&E mainstreaming frameworks
- Disability inclusion in infrastructure

ICED Facility tools and approaches adopted by development programming

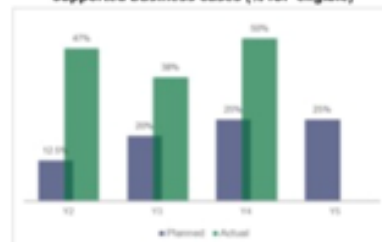


Mainstreaming

Extent to which Gender & Inclusion (G&I), Climate & Environment (C&E) and Political Economy Analysis (PEA) mainstreaming processes have been applied to ICED supported work packages:

100%

Extent of C&E mainstreaming within ICED Facility supported business cases (% ICF eligible)

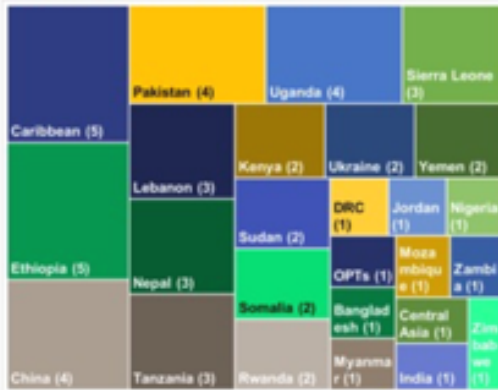


Our Clients



- The ICED Facility has worked with **36 clients** over its lifetime including DFID central teams, country offices, and other government departments.
- There have been **21 repeat clients** for ICED support across the 6 ICED portfolios.
- Central teams represent **over 50%** of deliverables.

ICED Facility's 26 country office clients



Work packages delivered



What our clients say

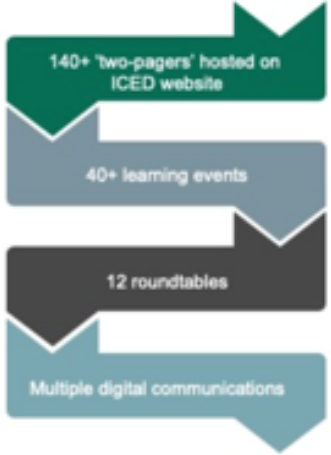


<p>"Thank you so much for your time, effort and patience in putting the WSA tool together... I hope this tool becomes an inherent part of how DFID/donors deliver energy policies and programmes"</p> <p>Whole Systems Approach – Infrastructure Advisor</p>	<p>"Thanks very much for this! I and SGU are really pleased with the tool... thanks for working so hard and producing such a good product!"</p> <p>SEAH Infrastructure Safeguarding Tool - Social Development Advisor</p>	<p>"Overall we feel the report is in a good place and provides a useful introduction to a range of technologies"</p> <p>ICED Digital Innovations in the Built Environment – Infrastructure Advisor</p>	<p>"The ICED facility should be used more strategically - facility should distinguish between work that needs to be demand-led (quick response) and that which is strategic in nature."</p> <p>Comment from DFID Advisor</p>	<p>"Thanks to you and the team all for your work on this piece. It was a very short timeline and I appreciate that you worked long hours to get it done"</p> <p>Climate Mitigation Cost Effectiveness – Chief Economist's Office</p>	<p>"The report has provided a consolidated picture of the learnings from a select sample of important previous funds. This has not been developed before".</p> <p>Capital Investments – Private Sector Advisor</p>	<p>"Very glad to see the amount of realism and level of applicability in these recommendations"</p> <p>Sudan Water Sector Programming VIM Strategy – Infrastructure Advisor</p>

Learning alongside delivery

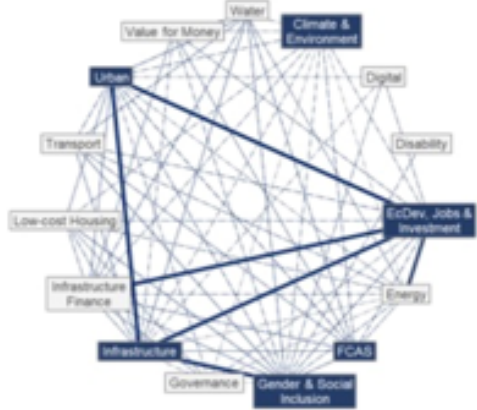


Knowledge and Learning



ICED Facility sectors

Over 200 ICED Facility legacy deliverables across 6 portfolios and 15 sectors



A conversation
on the ICED
Facility's
big issues

Effective Urbanisation



The problem

Breadth and depth

2.5 billion more urban residents by 2050; 90% in Africa and Asia

Knowledge

Inadequate and ineffectively deployed to understand a new urban paradigm

Approach

Sectoral when structural transformation is required



Our contribution

Adaptation of thematic programmes urban contexts

Guidance for future programme design (theory of urban programming)

Worked examples of new/adapted programmes (practice of urban programming).



Future opportunities

Collaborate and partner

To develop thought leadership and financial models

Develop tools and capacity

To understand and enable broader network activity

Target 2nd/3rd tier cities

To maximise impact

Climate Crisis



The problem

A limited carbon budget to limit temperature increases

Current emissions on track for **3-3.3°C of warming**



Our contribution

Increased awareness on how to **integrate (mainstream) climate change into DFID programming**

Provided knowledge on the **economics and efficacy of different climate solutions**

Identified **key information and data sources** relevant to non-climate specialists



Future opportunities

Finance

Expand the entry points and toolkit for climate finance intervention

Alignment

Ensuring financial flows of aid are aligned with the objectives of the Paris Agreement

Adaptation vs. mitigation

Greater account of the differences in objective – and hence instruments and institutions – between adaptation and mitigation?

Inclusive Infrastructure & Cities



The problem

The gender gap

Low rates of employment and economic participation by people with disabilities

High cost of violence against women



Our contribution

Bridging the gap between Infrastructure, Private Sector Development and Social Development cadres through our mainstreaming approach

Standalone work on priority G,D&I areas



Future opportunities

Build incentives for different stakeholders to support improved design – highlighting the opportunity (win-win) and developing the business case.

Deploy G,D&I expertise to support design and implementation at each stage to optimise infrastructure and urban delivery.

Programming in FCAS



The problem

Finding a Way through the Fog

The **scale** of fragility and conflict

The **nature** of fragility and conflict

Trajectories out of fragility and conflict



Our contribution

Integrating the analysis

The **political economy and security aspects** of infrastructure in FCAS

The **people dimensions** of infrastructure in FCAS

The **technical challenges** of infrastructure in FCAS



Future opportunities

Joining the dots

Is it worth it?

The bigger picture

Every day's a school day

Meeting the Financing Gap



The problem

\$18trn - \$57trn global infrastructure financing gap

Lack of bankable projects

Access to the right kind of capital



Our contribution

Support to close the gap between what investors are looking for in order to deploy their capital and what infrastructure project opportunities offer



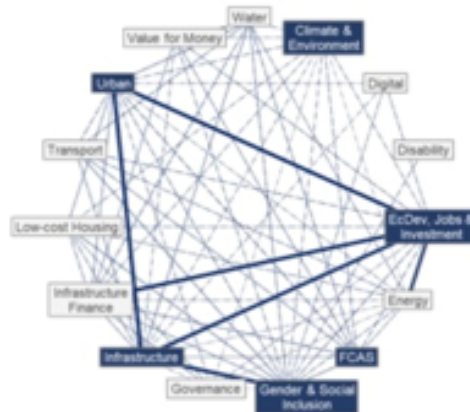
Future opportunities

In LMIC contexts, focus on specific country- and sector- level barriers

In LIC and FCAS contexts, use financing mechanisms to entice the private sector to invest. Donor agencies vs. DFIs have an important role to play at the bottom of the capital stack

New capital deployed should have a clear and differentiated mandate

Response and discussion



ICED Facility & DFID: What have we learned?

What worked



Flexibility and rapidity are important to establish value



Tools and evidence base are important to build credibility



Balance between leading and following demand: management can focus when demand becomes clear



Reputation and relationships take time to build up - branding and consistency of personnel are key

The ICED Facility Legacy

The ICED Facility Legacy



The ICED Facility Website

- Showcases publications for the wider public good, such as reports and summative '2-pagers' of ICED's work.
- Will be live for two years, though will not be updated after this month.



The ICED Facility Compendium

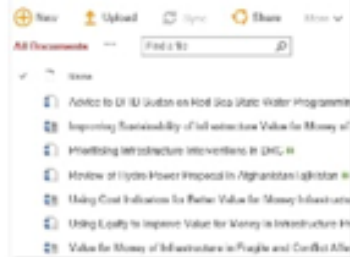
- Annotated guides to ICED's deliverables.
- Chapters are organised according to the 15 work areas where ICED's contribution has been greatest.
- Covers some 200+ reports, guides, and tools.
- Will be stored on the Infrastructure Cadre site from August 2019.
- The full library of ICED's deliverables and ToRs will be available on vault from August.



A Closer Look at the Compendium



ICED Compendium - FCAS



Closing thoughts



The ICED Facility has delivered over **180 technical assistance requests**, resulting in over **475 deliverables** - of which, there are **10 new business cases** amounting to **£902 million** in new infrastructure and urban programming - across **36 clients** including DFID central teams, country offices and other government departments.

Where do we go from here?