

## TOOLBOX: Influencing policy

### The challenge

It is crucial for the engineering profession to articulate its priorities and needs so that decision-makers can take them into account when enacting public policy. Professional engineering institutions (PEIs) face a range of barriers to successfully undertaking policy advocacy activities and, in turn, influencing policy. These include:

- Limited opportunities to participate in policymaking processes.
- Differing levels of engagement and responsiveness from government departments or agencies.
- Lack of public policy knowledge and 'soft' skills among engineers, hampering their ability to 'sell' engineering priorities in a way that is intelligible to the government.
- Lack of data, including databases of registered professionals and statistics on employment patterns, which limits PEIs' ability to provide expert advice to policymakers.
- Lack of recognition by government of the importance of engineering as a profession.
- Variable levels of visibility (for example among the media, public, and government) of PEIs.

### Initiatives

A number of PEIs are successfully expanding their role in supporting policy decisions through the provision of engineering expertise, helping policymakers to build capacity in addressing engineering issues and creating new forums and coalitions of PEIs to increase discussion and effective advocacy on public policies affecting the profession. In most countries, COVID-19 has presented an opportunity to increase the visibility of PEIs among policymakers due to many engineering actors being well positioned to rapidly respond to emerging crises. Key examples are illustrated below:

#### Providing expert advice and thought leadership



PEIs require engineers to complete activities, such as attending conferences or leading presentations, to receive credits to renew their registration

**Outcomes:** amended contractual clauses (eg benefitting local engineers), improved relationships and trust between engineering stakeholders and government, increased visibility of PEIs' added value as thought leaders

**PEIs:** Zimbabwe Institution of Engineers, Engineering Council Zimbabwe, Institute of Engineers Kenya, Engineering Council of South Africa, Institute of Municipal Engineering of Southern Africa

#### Recommending appointees to government



PEIs recommend engineering appointees for executive positions and other key posts within government departments

**Outcomes:** increased visibility of PEIs in policy making circles, improved collaboration with government agencies/departments, deepened professional collaboration

**PEIs:** Sierra Leone Institution of Engineers, Association of Consulting Engineers of Kenya, Institute of Engineers Kenya, Uganda Institution of Professional Engineers, Zimbabwe Institute of Engineers

#### Collaborating with the government for capacity building



PEIs seek opportunities to build the engineering capacity of government staff

**Outcomes:** improved relations with government, improved governance within public projects, increased visibility of PEIs, promotion of PEIs' value proposition

**PEIs:** South African Academy of Engineering, Institute of Engineers Kenya, Association of Consulting Engineers of Kenya, South African Institution Of Civil Engineering, Nigerian Society of Engineers

#### Involving policymakers in PEI activities



PEIs involve policymakers in their activities to improve systematic dialogue

**Outcomes:** increased visibility and voice of PEIs, opportunities for knowledge exchange, tailored and practical memorandums of understanding/ways of working

**PEIs:** Zimbabwe Institution of Engineers, Uganda National Association of Building and Civil Engineering Contractors, Nigerian Society of Engineers Federation of African Engineering Organisations, South African Institute of Agricultural Engineers, Institute of Engineers Kenya


## Case study: Policy advocacy success for Uganda Institution of Professional Engineers (UIPE)




To counteract the disproportionate awarding of public procurement contracts to foreign firms, UIPE successfully lobbied for the inclusion of local content requirements in publicly procured infrastructure projects. These requirements stipulate a threshold under which contracts must be awarded to national and resident providers. Foreign contractors must also subcontract at least 30% of the value of a contract to local companies (who are more likely to employ local engineers). In 2020, the Public Procurement and Disposal of Public Assets Authority (PPDA), in pursuit of the Government Policy of “Buy Uganda Build Uganda”, issued Guidelines on “Reservation schemes to promote local content in public procurement”. Accordingly, the PPDA noted that there had been an ‘increase in the value of contracts for works awarded to local providers’. However, UIPE lobbying efforts are not systematically successful, especially when major economic interests are in the balance; the reservation scheme applies to publicly procured infrastructure projects to the exception of the oil industry



Similarly, UNABCEC successfully influenced the Uganda Construction Industry Commission (UCICO) Bill, to regulate the awarding of engineering contracts and fight the issue of ‘briefcase contractors’ who are not registered with UNABCEC. In response to demand from UNABCEC, the Bill grants authority to UNABCEC to act against fake contractors. The Bill is yet to be enacted at the time of writing.

## Success factors and achievements

For each category of interventions, the table below identifies the implementation challenges and the success factors for these interventions. The table also highlights some of the strongest achievements.

Interventions	Challenges	Success factors	Examples and achievements
<p><b>Providing expert advice and thought leadership</b></p> 	<ul style="list-style-type: none"> <li>→ Lack of funding/ HR to maintain engagement across organisations</li> <li>→ Absence of formal constitution to support collaboration</li> <li>→ Lack of international accreditation to secure credibility in some partnerships</li> <li>→ Limited incentives for PEIs to ‘deviate’ from their contractual performance indicators</li> </ul>	<ul style="list-style-type: none"> <li>→ Funding and adequate capacity specifically to pursue collaboration opportunities with partners</li> <li>→ Memorandums of understanding negotiated / pushed by PEIs</li> <li>→ Strong collective leadership (through shared vision and values) to drive joint working between participant organisations</li> <li>→ Conducting a needs assessment of participating organisations to identify areas to improve dialogue between PEIs and policymakers</li> </ul>	<ul style="list-style-type: none"> <li>→ <b>Kenya – Institution of Engineers of Kenya (IEK): Support for harmonising technical regulations</b> In Kenya, each county sets their own tax regime on natural materials, making it complex for engineering companies to estimate building costs. IEK <b>benchmarked the different tax regimes</b> to support the counties’ Council of Governors in developing standard legislation that can then be customised to the different counties’ local situations.</li> <li>→ <b>South Africa – South African Academy of Engineering (SAAE) and Academy of Science of South Africa (ASSAf): assessment of South Africa’s shale gas industry readiness.</b> In 2016, SAAE and ASSAf partnered to produce a report, commissioned by the Department of Science and Technology, on the country’s technical readiness to support the shale gas industry. The report attracted wide interest from companies and national and international academic and industry actors.</li> </ul>

Interventions	Challenges	Success factors	Examples and achievements
<p><b>Providing expert advice and thought leadership</b></p> 			<p>→ <b>Nigeria – Federation of African Engineering Organisations (FAEO): Pan-African infrastructure scorecard</b> As part of the work of the World Federation of African Engineering Organisations Working Group on the Global Infrastructure Report Card (also hosted by FAEO), the pan-African infrastructure scorecard is guiding the development of infrastructure in line with common codes and standards, as well as <b>helping policymakers to identify opportunities to contribute to infrastructure provision</b> and development in Africa.</p> <p>→ <b>Zimbabwe – Zimbabwe Institution of Engineers (ZIE): National infrastructure scorecard</b> In 2020, ZIE was pivotal in lobbying to reduce the cost and to make it easier to <b>produce infrastructure scorecards</b> via the use of a mobile app. ZIE has already conducted scorecard <b>training initiatives</b> for stakeholders nationally and is in the final budgetary approval stages of taking forward projects based on identified gaps in infrastructure.</p>
<p><b>Recommending appointees to government</b></p> 	<p>→ Lack of funding and HR capacity to support recommendation process</p> <p>→ Lack of buy-in/delayed follow up from government regarding deprioritised policy areas</p>	<p>→ Targeting focus on most pressing needs / demands to help identify relevant HR support, roles and responsibilities</p> <p>→ Building and maintaining positive/consultative relationships with government and other discipline-specific PEIs, including through face-to-face symposiums and events in which to advocate for candidates</p>	<p>→ <b>Zimbabwe – Zimbabwe Institution of Engineers (ZIE): Recommending appointees</b> ZIE has lobbied for Secretary-level positions in government departments, which have been successfully accepted by ministries. In 2020, a female ZIE member was appointed to Secretary for the Ministry of Local Government and Housing, which ZIE believes will be a key connection for advancing the prioritisation of local employment opportunities.</p>
<p><b>Collaborating with the government for capacity building</b></p> 	<p>→ Limited appetite and/or capacity for cooperation and collaboration at government level</p> <p>→ Lack of clarity on incentives for joint working and knowledge exchange</p>	<p>→ Setting up memorandums of understanding with government to clearly set out stakeholder vision and shared incentives</p> <p>→ Securing external funding to specifically support capacity building initiatives</p>	<p>→ <b>South Africa – Institute of Municipal Engineering of Southern Africa (IMESA): National Treasury initiative</b> IMESA improves the technical skills of municipality staff and engages with the National Treasury Initiative to assess municipalities' challenges in delivering services. Together with the South African Local Government Association, IMESA has been establishing a core skills database, and a software (the Asset Management Program Learning Environment) which will be made available to municipalities via its website.</p>

Interventions	Challenges	Success factors	Examples and achievements
<p><b>Collaborating with the government for capacity building</b></p> 	<ul style="list-style-type: none"> <li>→ Absence of formal constitution or agreement to support capacity building ventures</li> </ul>	<ul style="list-style-type: none"> <li>→ Using existing expertise/industry-relevant skills within the PEI membership base to advance technical assistance / collaboration opportunities</li> </ul>	<ul style="list-style-type: none"> <li>→ <b>South Africa – Institute of Municipal Engineering of Southern Africa (IMESA): Annual conferences for building the capacity of municipalities</b> 18 research papers were presented at IMESA's Annual conference on 'Conquering municipal challenges', where IMESA's President highlighted to the government the need for private contractors to hire a minimum percentage of students as part of their contract with the municipality.</li> </ul>
<p><b>Involving policymakers in PEI activities</b></p> 	<ul style="list-style-type: none"> <li>→ Lack of funding/ resources to establish and maintain collaborative activities</li> <li>→ Differing agendas and claims from one PEI to another</li> </ul>	<ul style="list-style-type: none"> <li>→ Building and maintaining positive relationships with government and discipline-specific PEIs</li> <li>→ Meeting regularly with other PEIs with a focused agenda</li> <li>→ Memorandums of Understanding in place</li> <li>→ Allowing PEIs to maintain autonomy in how they contribute to forums</li> </ul>	<ul style="list-style-type: none"> <li>→ <b>Zimbabwe – Zimbabwe Institution of Engineers (ZIE): Infrastructure conference</b> In July 2018, ZIE organised a national conference about 'Accelerated Infrastructure Investment, Development and Delivery in Zimbabwe'. The event was attended by 8 government officials and opened by the <b>President of Zimbabwe</b>, who also met privately with ZIE representatives to discuss topical issues for the profession.</li> <li>→ <b>South Africa – South African Institute of Agricultural Engineers (SAIAE): Pan African Society for Agricultural Engineering</b> Funded by the Global Challenges Research Fund (GCRF), the South African Institute of Agricultural Engineers (SAIAE) established a Pan African Society for Agricultural Engineering (PASAE), to promote collaboration between African PEIs focused on agricultural engineering and <b>promote activities with government institutions</b> through champions in-country.</li> <li>→ <b>World Federation of African Engineering Organisations (WFEO): Forums for policymakers and institutions</b> PEIs participate in WFEO's forum which <b>engage national policymakers and professional engineering institutions</b> in a coordinated and systematic way. An example is the UNESCO Engineering Week, which the South African Department for Science and Technology has now endorsed. In addition, WFEO coordinates data on engineering activities across many African countries through the UNESCO African Engineering Reports.</li> </ul>