

Internet Appendix A19: Research Policy

Figure A19.1 Illustrative Pitch Example on University Engagement with Controversial Industries

Pitcher's Name	Liz Hardie	Date: 29/8/14
(A) Working Title	How do universities engage with controversial industries? A case-study of onshore / unconventional gas research programs funded by industry.	
(B) Basic Research Question	<p>The primary research question is how do universities engage with controversial industries? The supporting questions are:</p> <ul style="list-style-type: none"> • How do the critical organisational stakeholders for legitimacy (The State, the public, business, students, alumni and Media) <u>view</u> the credibility and legitimacy of the University-Business Collaborations (UBCs) focused on onshore unconventional gas research? • What strategies do UBCs pursue to create and maintain the UBC, university, company and industry legitimacy in the midst of the populist debate about unconventional gas? 	
(C) Key paper(s)	<ul style="list-style-type: none"> • Jain, Sanjay, and Gerard George. 2007. "Technology transfer offices as institutional entrepreneurs: the case of Wisconsin Alumni Research Foundation and human embryonic stem cells." <i>Industrial and Corporate Change</i> 16(4):b535-67. • Lind, Frida, Alexander Styhre, and Lise Aabo. 2013. "Exploring university-industry collaboration in research centres." <i>European Journal of Innovation Management</i> 16(1): 70-91. 	
(D) Motivation/Puzzle	<p>In response to the emergence of a booming and controversial industries like onshore/unconventional gas, the strategies employed by UBCs transcend the traditional collaborative research and contracted research activities to form and reform the identity and legitimacy of the research centres, companies, industry and universities involved. The conundrums are as follows: When research centres engage with controversial industries, are the identities or legitimacy of the university being impacted? Is the university involvement with controversial industries indicative of the State's requirements for generating, collating and evaluating evidence for policy-making? Is the UBC research cooperation fulfilling State requirements for businesses to undertake local procurement? Through involvement with UBCs, are businesses gaining legitimacy and "social licence to operate"? When engaging with controversial industries, to what extent do universities need to participate in the strategies that controversial industries undertake to maintain their legitimacy?</p>	
THREE	Three core aspects of any empirical research project i.e. the "IDioTs" guide	
(E) Idea?	<p>The traditional roles of university research centres and technology transfer offices at some universities are merging as universities find new channels and organisational forms to engage more closely with industry partners. Literatures regarding how universities transfer technology, valorise research, manage research integrity and research ethics do not speak to the how universities position themselves within public debates about emerging and controversial industries. The research centres engaging with industry partners represent and reflect not only themselves but the collaborating university and companies' social and economic missions in the public record. The identity and the legitimacy of the UBC within the public debates surrounding the emerging, booming and controversial industry of onshore / unconventional gas provide insights into the ongoing identity and legitimacy of the universities. It also provides practical advice for university decision-makers engaging with controversial industries in the future.</p>	
(F) Data?	<p>The setting for this project is onshore/unconventional gas research programs or centres, located at universities, funded partly or wholly by industry. The case study comprises ten sites. The universities are located in countries where large onshore/unconventional gas extraction projects have been proposed or commenced, and English is the dominant language. The initial period of time under analysis will be 2010-2014, but if the historical context for the establishment of the research programs becomes important, the time period will be extended backward. This qualitative case study employs three different types of collection techniques - observations, semi-structured interviews and document analysis. The sampling plan for observation includes attending the operational meetings of the Centre for Coal Seam Gas at the University of Queensland and any other meetings of research centres at other sites that I am able to. A "purposeful" sampling plan for interviews will be implemented as it is important to identify and speak with individuals who can shed the most light on the subjects of university-business collaboration and onshore/unconventional gas including university, government and industry representatives. As the topic of this study involves a major economic development and Queensland's largest university, these social actions warrant direct involvement and interest from current and former "elite" leaders who hold formal authority or are experts in the arena. The documents to be analysed include UBC websites, corporate communications from the collaborating university and business, university policies and procedures, government policies and statements, and media reports.</p>	

	It is anticipated that the documents will be publically available, but I may approach university records management section for access to internal documents if recommended by interviewees.
(G) Tools?	This grounded interpretive study will use an automated content analysis of documents in the public sphere (using Leximancer) augmented by the transcripts from interviews with informants from one or two of the sites.
TWO	Two key questions
(H) What's New?	The idea of universities threatening their current identity and legitimacy by engaging with controversial industries is novel. The opportunity of being a social science researcher imbedded within a research centre operating in this environment is rare.
(I) So What?	As universities engage more closely with industry partners, external stakeholders will expect not only transparency and accountability, but also adherence to the social and economic missions of the day. This research will illuminate and compare several examples of where the social and economic missions of a university are contested, providing evidence for future innovation policy-makers and university decision-makers.
ONE	One bottom line
(J) Contribution?	<p><i>Unique Contribution to theory</i> – Recent literature on organizational legitimacy suggests that for organizations operating in controversial industries the standards of scrutiny are higher. These organisations need to gain the endorsement of external stakeholders in order to successfully operate. Writing about a failed bid for a casino in the UK, Reast et al. (2013) devised a bi-dimensional model of legitimacy-seeking strategies. The model integrates various tactics into four generic strategies - construing, earning, bargaining, and capturing, as well as pathways that combine these strategies. Acknowledging the context-dependent nature of legitimacy, they call for additional research into organisations from other industries to extend knowledge of this issue. My study stands to expand their model. Research pertaining to the specific ways organizations in controversial industries seeks credibility and support is sparse. One of two exceptions is use by Patriotta, Gond and Schultz (2011) of Boltanski and Thévenot's theory of justification to account for how various stakeholder groups actively engage with discourses and objects to maintain the legitimacy of institutions. The site for analysis was a nuclear accident in Germany. The second example of previous research in this arena is the analysis of oil companies' websites for Corporate Social Responsibility (CSR) strategies, which was completed by Du and Vieira (2011). My intended contribution to the organisational legitimacy literature seeks to extend the insights of Jain & George (2006) on the role of technology transfer offices and universities in the promotion of controversial industries and technologies' legitimacy. My contribution to the University-Business collaboration literature will be to make explicit the issues surrounding both the university and the industry partners' legitimacy when universities engage with controversial industries and projects. Few studies have focused on organisational identity and legitimacy of universities. Until recently there has been limited focus on the identity of universities (Steiner, Sundström, & Sammalisto, 2013; Weerts, Freed, & Morphew, 2014) and an initial scan of the literature did not find any works related to UBCs.</p> <p><i>Unique Contribution to practice</i> – Provides data and advice to the leadership of the universities about how their potential competitors or collaborators are operating and responding to public debates.</p> <p><i>Unique Contribution to policy</i> – The benefits of university-industry engagement are frequently researched and debated but the risks and strategies for mitigating them are infrequently identified. This research will provide useful insights into UBC for Federal and State higher education and innovation policy at a time when the future of the higher education sector is being hotly debated.</p>
(K) Other Considerations	<p>Targets Journals - Strategic Management Journal, Research Policy, Cambridge Journal of Economics or Organisational Studies.</p> <p>Collaboration - With access to additional funding and through the connections of researchers at the Centre for Coal Seam Gas, there may be an opportunity to undertake another "deep-dive" case study at another research centre.</p> <p>Risk Assessment – low. I am not aware of anyone else researching in this arena. The issues surrounding universities' engagement with controversial industries will not disappear.</p>