

# HOLISTIC SECURITY RISKS MANAGEMENT STRATEGIES FOR E&Ps: OPTIMIZING PERFORMANCE BY REDUCING SURFACE RISK<sup>†</sup>

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## I. INTRODUCTION

Exploration and production companies frequently partner with host countries that struggle to: (1) maintain political stability; (2) guarantee sound governance; (3) provide adequate transparency; (4) eliminate security threats; and (5) meet human rights standards. These conditions make it difficult to develop security strategies to protect company employees and assets in country. As a response, we have interviewed elite actors who populate the risk management networks in question. The interviews provide a cross-section of perspectives as to how well upstream producers are crafting and implementing security risk management strategies. These perspectives provide a degree of corroboration that confirms that current incentives provide an opportunity to create a win-win scenario for companies and the public interest.

Since business thinks primarily in the terms of economics and finance,<sup>1</sup> it is practical to frame the risks posed by these operating environments in this manner. Key to understanding the valuation of an upstream producer is the calculation used to determine the expected gross revenues for a particular upstream project. The expected gross revenues equal the predicted future prices of the commodity multiplied by its expected future quantities of production over the project's projected life cycle.<sup>2</sup>

Valuation analysts use reserve reports to assess the future quantities of production.<sup>3</sup> These reports are the "foundation of valuation" for establishing expected gross revenues.<sup>4</sup> Above-ground threats to production, on-site employees, and upstream infrastructure fall within the category of "surface risk".<sup>5</sup> A good definition of surface risk is "the variety of political,

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<sup>1</sup> See generally, Peter F Drucker, *The Concept of the Corporation*, (new ed, Transaction Publishers 1996); and Michael E Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (Free Press, 1998).

<sup>2</sup> Charlotte J Wright and Robert M Cornell, 'Fair Market Value and Valuation Methods of Oil and Gas Properties' (2014) 33 *Petroleum Accounting & Financial Management* J 55, 68.

<sup>3</sup> *ibid* 58.

<sup>4</sup> *ibid* 58.

<sup>5</sup> CRK Moore, 'Perspectives on the Valuation of Upstream Oil and Gas Interests: An Overview' (2009) 2 *JWEL & B* 24, 32.

environmental, logistical, commercial or bureaucratic issues that may impact project performance”.<sup>6</sup> Surface risk is a key consideration when establishing the present value of future cash flows, or discount rate, which is calculated by adding the costs of all risks associated with such production over the asset’s lifecycle.<sup>7</sup> The discount rate is deducted from expected gross revenues to establish the value of the asset.

Four economic rationales exist for investing in reducing security risk: (1) it prevents delays in exploration operations and production disruptions, increasing the net present value of assets; (2) it reduces the predicted cost of surface risk, increasing the predicted value of future assets; (3) since it directly impacts asset value, it also directly impacts the cost of capital; and (4) it protects reputational capital, which is a governance-commodity directly linked to business certainty.

Of the four, the fourth rationale is not as obvious as the others. Many countries’ government agencies, which are responsible for the oversight of exploration and production activities, are decentering their decision-making authority.<sup>8</sup> Political mechanisms, such as “social license”, are granting local communities more discretion to craft the conditions in which energy projects will operate in their communities – including a significant voice as to whether or not projects go forward.<sup>9</sup> This decentering of discretion reflects one way in which

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<sup>6</sup> *ibid* 32. Moreover, it is also useful to review what a risk constitutes in the rubric of field security operations. It is a complex question. Discretely, field security risk could present in the form of assault, kidnapping, murder, terrorism, vandalism, theft, insurrection/riot and violent state suppression of unrest. These risks are often quantified in terms of likelihood and severity when judging whether investment in a given area is even practicable. The risk to a petroleum company of vandalism may be less pronounced than the reputational risk of a murder perpetrated against a citizen of the host state. The risks vary enormously from country to country and are informed by a complex interaction of factors, such as: history, politics, race, language, economics, crime, policing, labour relations, infrastructure investment, literacy, poverty, pollution, health and even the constitutional division of governmental authorities.

<sup>7</sup> *ibid* 35-37. Also see Wright and Cornell (n 2) 58. Also take into consideration the Petroleum Risk Manager rating system, see Alexander Van de Putte, David F Gates, and Ann K Holder, ‘Political Risk Insurance as an Instrument to Reduce Oil and Gas Investment Risk and Manage Investment Returns’ (2012) 4 *JWEL & B* 284, 287-288.

<sup>8</sup> Barry Barton and Michael Goldsmith, ‘Community and Sharing’, in Lila Barrera-Hernandez and others (eds), *Sharing the Costs and Benefits of Energy and Resource Activity* (Oxford University Press, 2016) 34. Also see Thomas Sikor, Eva Barlösius and Waltina Scheumann, ‘Introduction: Public-Private Relations and Key Policy Issues in Natural Resource Governance’ in Thomas Sikor (ed) *Public and Private in Natural Resource Governance*, (1<sup>st</sup> ed paperback, Taylor & Francis 2016) 5-15.

<sup>9</sup> In the Canadian context, Rowland J Harrison, former member of Canada’s National Energy Board, remarked on the impacts of social licence in a public lecture he gave at the Faculty of Law at the University of Alberta on March 10, 2015. For a written version of the speech, see Rowland J Harrison, *Social License to Operate the Good, the Bad, the Ominous* (13 March 2017) Canadian Association of Petroleum Landmen online: <<http://landman.ca/2017/03/13/social-license-operate/>>. For impacts in the U.S. context, see Don Smith, ‘Social License to Operate in the Unconventional Oil & Gas Development Sector: The Colorado Experience’ in Lila Barrera-Hernandez and others (eds), *Sharing the Costs and Benefits of Energy and Resource Activity* (Oxford University Press 2016) 123-124.