



NXT ENERGY SOLUTIONS INC.
As at and for the three and six months ended June 30, 2010
MANAGEMENT'S DISCUSSION AND ANALYSIS

As used in this MD&A, the terms "we", "us", "our", "NXT" and "company" mean NXT Energy Solutions Inc.

Our reporting currency is the Canadian dollar. All references to "dollars" in this MD&A refer to Canadian or Cdn. dollars unless specific reference is made to United States or U.S. dollars.

Forward-Looking Statements

Certain statements in this document may constitute "forward-looking statements". These forward-looking statements can generally be identified as such because of the context of the statements including words such as "believes", "anticipates", "expects", "plans", "estimates" or words of a similar nature.

These forward-looking statements are based on current expectations and are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Except as required by law, the company assumes no obligation to update forward-looking statements should circumstances or the company's estimates or opinions change.

Description of Business

NXT is a Calgary based company providing airborne survey solutions that enable our clients to focus their exploration decisions concerning land commitments, data acquisition expenditures or prospect prioritization onto the areas with the greatest hydrocarbon potential. Utilizing its proprietary airborne Stress Field Detection ("SFD®") survey system, NXT provides a unique survey method that is environmentally noninvasive and unaffected by ground security issues or difficult terrain. Additionally, surveys can generally be conducted year round and are effective both onshore and offshore. The advantage to NXT's clients is an efficient and reliable method to explore for hydrocarbons.

On September 22, 2008 the company changed its name from Energy Exploration Technologies Inc to NXT Energy Solutions Inc. This change was approved by shareholders at the November 29, 2007 Annual General Meeting. The name change was implemented to better reflect our principal activities and now aligns with the NXT trademark. SFD® and NXT® in Canada and the U.S. are the registered trademarks of NXT Energy Solutions Inc.

Overall Performance

In early 2009 NXT embarked on a fundamentally new business strategy with the objective of becoming established as a respected service provider and industry leader for oil and gas reconnaissance surveys in Colombia. We believe this strategy will position NXT for long term commercial success by creating a strong client and revenue base in Colombia and providing a "springboard" for revenue growth in adjacent Latin American countries and throughout the world.

Previous NXT reports outlined our reasoning for the selection of Colombia as our initial international market and the 2010 first quarter report identifies several indicators confirming that we are making progress in achieving our objectives in Colombia.

We remain satisfied that we are making progress in the first phase of implementing our strategy, which is to gain market acceptance of the value of our SFD® technology in Colombia. The operational advantages of our airborne survey system are compelling and becoming well understood in Colombia. However, in order to gain an understanding of when this growing market acceptance may generate SFD® survey revenue does require a discussion of the Colombian exploration system.

The contract terms entered into by oil and gas companies for concession blocks effectively dictate what exploration activities they will conduct in Colombia. Exploration is governed by specific contractual obligations entered into between an operator of a concession block and the Colombian oil and gas regulatory agency (the “ANH”). The contract defines the work commitment that is required to maintain mineral rights for a block. A contracted work commitment consists of specific capital programs that include geophysical surveys and/or the drilling of wells. The contract identifies what is to be done, the dollars to be spent and the completion deadlines (including annual milestones over a three year contract period). Furthermore the operator must provide sufficient security to the ANH, usually in the form of a bond, that will be drawn upon should the operator default on a contractual commitment. Given these strict terms and penalties, operators generally allocate capital budgets only to these contracted work commitments.

In the past this structure created a barrier for NXT entering the Colombian market as earlier contracted work commitments would not have included an SFD® survey component. Accordingly SFD®, regardless of its merits, was a difficult sale.

Despite these obstacles, NXT did close sales and completed surveys for clients in 2009 and 2010. One client re-negotiated their work commitment with the ANH and replaced an existing seismic survey commitment with an SFD® survey. Other clients engaged NXT for small pilot SFD® surveys despite the surveys not being recognized as work commitments. Collectively these SFD® surveys resulted in over \$4 million of survey revenue and allowed NXT to acquire over 20,000 km of SFD® data in Colombia. The success of these SFD® surveys and subsequent client endorsements was instrumental in the ANH approving SFD® as a valid work commitment for the 2010 bid round.

This recent recognition of SFD® as a valid work commitment by the ANH has removed this major barrier for NXT in the Colombian market, opening up opportunities for revenue growth. Many 2010 bid round blocks include minimum (i.e. mandatory) work components that can be satisfied with SFD® surveys. In addition companies bid extra work commitments that may provide more opportunities for SFD® surveys.

We anticipate some modest revenue throughout the balance of 2010 with more significant opportunities from the 2010 bid round to commence in 2011. Formal execution of the 2010 bid round contracts is anticipated to be finalized in November 2010 with work commitment projects to commence in 2011. The 2010 revenue opportunities arise from companies interested in acquiring existing SFD® data over concession blocks awarded in prior years.

We believe that the 2010 bid round and the clear acceptance of SFD® as a valid work commitment is a turning point in our business development in Colombia and has positioned us for success not just in Colombia, but in other Latin American countries. We believe that the next phase of our business development of converting market acceptance into significant and consistent revenue growth is in the near future.

We have now commenced sales activities in Peru. The geology, community issues, security and environmental concerns are very similar to Colombia. Many companies operate in both Colombia and Peru including all our Colombian clients. In addition, the 2010 Peruvian bid round, which will close on October 11, 2010, affords NXT an additional opportunity to position SFD® as a valid bid round work commitment.

On August 26, 2010 we engaged a respected Peruvian representative to act as our non-exclusive sales representative in the country and to work with the Peruvian regulatory agency, PeruPetro, to ensure that SFD® is recognized as a valid work commitment. Given our recent success in Colombia we anticipate that this approval is forthcoming. We have been informed by companies of their intention to conduct SFD® surveys in Peru upon receiving confirmation that PeruPetro has publicly accepted SFD® as a valid survey to meet their work commitments.

Results of Operations

The company reported a net loss of \$890,673 and \$2,213,145 for the three months and six months respectively ended June 30, 2010 (compared to net income of \$283,005 and a net loss of \$764,076 for the same periods in 2009), representing an overall increase in loss of \$1,449,069 for the period. The increase is primarily the result of the increase in expenses associated with opening a Colombian branch in order to meet the legal requirements of continuing to do business in that country as well as marketing expenses as we continue to focus our efforts in Colombia.

Revenue

	For the three months ended		For the six months ended	
	June 30, 2010	June 30, 2009	June 30, 2010	June 30, 2009
SFD® survey revenue	\$ 443,011	\$ 2,638,560	\$ 443,011	\$ 2,638,560
Oil & gas revenue	\$ 1,947	199	3,342	427
Total revenue	\$ 444,958	\$ 2,638,759	\$ 446,353	\$ 2,638,987

SFD® Survey Revenue

In the first six months of 2010 the company recognized \$443,011 of SFD® survey revenue related to one contract for a Colombian client (Q2 2009 - \$2,638,560). During the second quarter of 2010 the company received payment of \$391,451 towards the revenue earned with the balance was received subsequent to the end of the second quarter.

Expenses

	For the three months ended		For the six months ended	
	June 30, 2010	June 30, 2009	June 30, 2010	June 30, 2009
SFD® survey cost	\$ 342,959	\$ 1,092,869	\$ 461,015	\$ 1,105,700
Oil and natural gas operating expenses	(1,276)	5,423	(1,276)	6,818
Administrative	973,927	1,010,039	2,122,011	2,031,921
Amortization and depreciation	41,231	45,853	85,522	85,676
	\$ 1,356,841	\$ 2,154,184	\$ 2,667,272	\$ 3,230,115

Expenses - for the three months and six months ended June 30, 2010 and 2009

SFD® survey costs - to date in 2010 we have had survey costs of \$461,015 (\$1,105,700 - six months ended June 30, 2009) which includes non-revenue survey costs of \$149,719 (nil - 2009) and commissions on sales of \$13,715 (\$129,548 - 2009).

Administrative - the increase of \$90,090 in the first half of 2010 (Q2 2010 - \$36,112 decrease) in comparison to the first half of 2009 relates mainly to increases in salary, instituting annual directors' fees and to the establishment of a Colombian branch in January 2010 which entailed engaging branch personnel for administrative and sales purposes. We incurred additional travel costs in connection with the opening of the branch as well as for additional marketing initiatives. These increased costs were somewhat offset by a decrease in stock based compensation due to the expiration of contractor options.

Other Expense (Income)

	For the three months ended		For the six months ended	
	June 30, 2010	June 30, 2009	June 30, 2010	June 30, 2009
Interest income	\$ (2,547)	\$ (24,905)	\$ (3,494)	\$ (69,224)
Loss (gain) on foreign exchange	(19,461)	(38,153)	(7,148)	(25,771)
Gain on sale of property	-	-	1,074	(1,016)
Abandonment	798	772	1,794	5,103
Other expense (income)	\$ (21,210)	\$ (62,286)	\$ (7,774)	\$ (90,908)

Interest income - interest income is offset by interest expense resulting in \$2,547 of income in Q2 2010 (cumulative \$3,494) as compared to \$24,905 of income in Q2 2009 (cumulative \$69,224). In 2009 our investments matured generating interest income at pre-market downturn rates. These investments were then re-invested at the lower interest rates available from financial institutions due to the downturn in the economy. Also, some investments have been redeemed for ongoing operations.

Loss or gain on foreign exchange - loss or gain on foreign exchange is caused by changes in the relative exchange values of the U.S. dollar, Canadian dollar and Colombian peso. For example, when the Canadian dollar trades higher relative to the U.S. dollar or COP, cash held in U.S. dollars or COP will decline in value and this decline will be reflected as a foreign exchange loss in the period.

Loss (gain) on sale of property - the company sold its sole vehicle in the first quarter of 2009 and realized a gain of \$1,016; in the first quarter of 2010 the company disposed of two older computers that had not yet fully depreciated.

Summary of Quarterly Results (unaudited)

	Jun 30, 2010	Mar 31, 2010	Dec 31, 2009	Sep 30, 2009
Revenue	\$ 444,958	\$ 1,395	\$ 1,044,889	\$ 447
Net income (loss)	(890,673)	(1,322,472)	(657,401)	(969,591)
Basic earnings (loss) per share	(0.03)	(0.04)	(0.02)	(0.03)
Diluted earnings (loss) per share	\$ (0.03)	\$ (0.04)	\$ (0.02)	\$ (0.03)

	Jun 30, 2009	Mar 31, 2009	Dec 31, 2008	Sep 30, 2008
Revenue	\$ 2,638,759	\$ 228	\$ 6,153	\$ 1,193,250
Net income (loss)	283,005	(1,047,081)	(945,394)	(290,639)
Basic earnings (loss) per share	0.01	(0.03)	(0.04)	(0.01)
Diluted earnings (loss) per share	\$ 0.01	\$ (0.03)	\$ (0.04)	\$ (0.01)

Q2 2010 to Q1 2010 comparison: the company recognized \$443,011 in survey revenue, \$100,864 in stock based compensation expense and recorded \$342,959 in survey costs in Q2 (respectively nil, \$69,356 and \$118,056 - Q1).

Q1 2010 to Q4 2009 comparison: the company recognized no survey revenue, \$69,356 in stock-based compensation expense and recorded no survey costs in Q1 (respectively \$1,044,766, \$187,343 and \$508,308 - Q4).

Q4 2009 to Q3 2009 comparison: the company recognized \$1,044,766 in survey revenue in Q4 (nil - Q3) and recognized \$187,343 in stock-based compensation expense (\$112,254 - Q3).

Q3 2009 to Q2 2009 comparison: the net loss in Q3 is due to the company recognizing no survey revenue in Q3 (\$2,638,560 - Q2).

Q2 2009 to Q1 2009 comparison: the company recognized \$2,638,560 in survey revenue in Q2 (nil - Q1) for one completed international survey contract resulting in net income. Our expenses in the second quarter are higher due to the ramp up required for executing an international survey contract as well as increased costs as we pursue marketing to foreign markets.

Q1 2009 to Q4 2008 comparison: the increased net loss in Q1 2009 over Q4 2008 of \$115,744 is due to additional salary costs incurred with the hiring of a COO to augment our senior management staff, fees for a geosciences consultant, higher stock-based compensation costs and costs incurred for the NAPE conference in Houston, Texas.

Q4 2008 to Q3 2008 comparison: the company recognized no survey revenue in Q4 (\$1,200,000 in Q3 from one completed survey contract) and recognized \$207,457 in stock-based compensation expense (\$144,843 - Q3).

Liquidity and Capital Resources

The company's cash position at June 30, 2010 continues to be adequate to support operations for 2010. Our cash and equivalents and short term investments held on account as of August 25, 2010 is \$2,567,979. Pursuant to the terms of the SFD® contract executed during Q2 we have received the balance of \$43,323 subsequent to the end of the quarter.

With cash and short term investments we forecast having the required cash to operate for the balance of the year without any additional sources of cash. Our ability to continue as a going concern will ultimately be dependent upon our ability to sustain positive cash flow from operations and/or obtain additional financing. There is significant doubt about the appropriateness of the use of the going concern assumption because the company has experienced losses in 2008 through to the present, has experienced negative cash flow from operations over these years and management believes working capital as at June 30, 2010 of \$2.5 million is not sufficient to support the company's operations for the next twelve months without additional revenue or capital.

The following table summarizes the change in cash flow for the three and six months ended June 30, 2010 and 2009:

	For the three months ended		For the six months ended	
	June 30, 2010	June 30, 2009	June 30, 2010	June 30, 2009
Cash used in operating activities	\$ (766,931)	\$ (1,192,922)	\$ (1,141,170)	\$ (2,075,867)
Cash generated by financing activities	31,435	48,268	50,269	46,335
Cash (used) in investing activities	(2,098,936)	4,731,133	(2,139,972)	5,776,554
	<u>\$ (2,834,432)</u>	<u>\$ 3,586,479</u>	<u>\$ (3,230,873)</u>	<u>\$ 3,747,022</u>

Operating Activities

Q2 2010 - the \$766,931 cash balance used in operating activities reflects our net loss of \$890,673 adjusted for \$74,610 of non-cash deductions and a change of \$49,132 in non-cash working capital. For the first six months of 2010 the \$1,141,170 cash balance used reflects a net loss of \$2,213,145 adjusted for \$189,254 of non-cash deductions and a change of \$882,721 in non-cash working capital.

Q2 2009 - the \$1,192,922 cash balance used in operating activities reflects our net income of \$283,005 adjusted for \$192,698 of non-cash deductions and a change of \$1,668,625 in non-cash working capital. For the first six months of 2009 the \$2,075,867 cash balance used reflects a net loss of \$764,076 adjusted for \$462,226 of non-cash deductions and a change of \$1,774,017 in non-cash working capital.

Financing Activities

Q2 2010 - \$33,582 was provided through the exercise of options, net of issue costs and \$2,147 was paid on our capital lease (\$54,518 through the exercise of options and \$4,249 paid on capital lease in the first six months of 2009).

Q2 2009 - \$50,239 was provided through the issuance of a private placement, net of issue costs and \$1,971 was paid on our capital lease (\$3,904 paid on capital lease in the first six months of 2009).

Investing Activities

Q2 2010 - we increased our short term investments by \$2,001,313 and increased restricted cash by \$89,938. We used \$8,086 for other property and equipment (\$49,122 for first six months of 2010).

Q2 2009 - we decreased our short term investments by \$4,817,251 (first six months of 2009 - \$5,900,102). We used \$88,022 for other property and equipment (\$125,452 for the first six months of 2009).

Contractual Commitments

The company has an office lease until October 31, 2012 which requires minimum monthly lease payments of \$31,871.

Transactions with Related Parties

An officer of the company exercised 50,000 options in the first quarter of 2010.

Additional Disclosures

Outstanding share data

	As at August 25, 2010	As at December 31, 2009
Outstanding securities		
Common shares	30,801,796	30,701,796
Preferred shares	10,000,000	10,000,000
Options	2,328,204	2,757,204
Total	<u>43,130,000</u>	<u>43,459,000</u>

Critical Accounting Estimates

Factors are substantially unchanged; refer to annual MD&A as at December 31, 2009.

Change in Accounting Policies Including Initial Adoption

Factors are substantially unchanged; refer to annual MD&A as at December 31, 2009.

Disclosure Controls, Procedures and Internal Controls over Financial Reporting

The company's Chief Executive Officer and Chief Financial Officer (the "Responsible Officers") are responsible for establishing and maintaining disclosure controls and procedures, or causing them to be designed under their supervision, for the company to provide reasonable assurance that material information relating to the company is made known to the Responsible Officers by others within the organization, particularly during the period in which the company's quarterly and year-end financial statements and MD&A are being prepared. However, any internal control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Disclosure controls and other procedures are designed to ensure that information required to be disclosed in reports filed or submitted is recorded, processed, summarized and reported within the time periods specified by the relevant security authority in either Canada or the United States of America. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports is accumulated and communicated to management, including our Responsible Officers, to allow timely decisions regarding required disclosure.

As of June 30, 2010 an evaluation was carried out under the supervision of, and with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the company's disclosure controls and procedures as defined under the rules adopted by the Canadian securities regulatory authorities and by the SEC. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the company's disclosure controls and procedures were effective as at June 30, 2010.

During the period ended June 30, 2010 there have been no changes in the company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting.

We continue to monitor the following areas that we believe are most susceptible to control weaknesses common to many companies of our size:

- Due to the limited number of staff at the company it is not feasible to achieve complete segregation of incompatible duties. The company has mitigated this concern in controls by adding management review procedures of the areas where segregation is an issue; and
- The company does not retain staff with specialized and current income tax, financial reporting and complex accounting expertise. The company prepares their best estimate of complex accounting calculations and relies on reviews by management, external consultants and the audit committee for quality assurance.

Notwithstanding the foregoing, all internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based upon the company's current market capitalization, the company is exempt from section 404(b) of the Sarbanes-Oxley Act and, accordingly, for fiscal 2010 the company does not require an external auditor's attestation of its internal controls over financial reporting. This section 404(b) exemption will apply to any future year when the company's public float is valued at less than U.S. \$75,000,000.

For additional information on NXT Energy Solutions Inc. please consult our web page at www.nxtenergy.com, or the SEDAR webpage at <http://www.sedar.com>.