

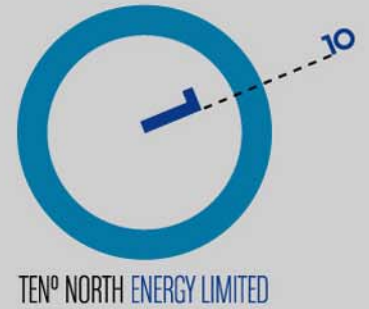
## DFL Conference

Is Productivity Falling and What are the  
Incentives for Improving Productivity?

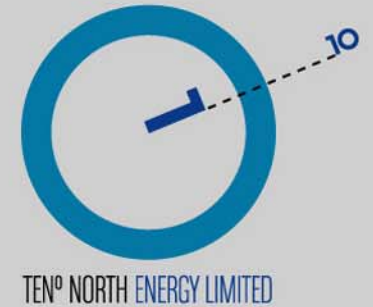
Dr Jim Lee Young  
21st March 2006  
Port of Spain

# Agenda

- Introduction
- Is productivity on the decline
- What can be done to improve productivity
- Conclusions

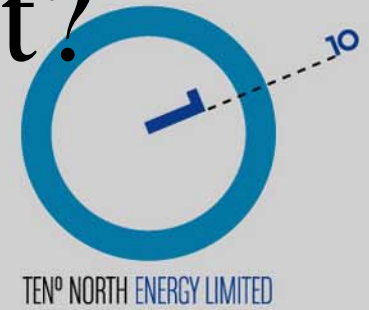


# What is Productivity?

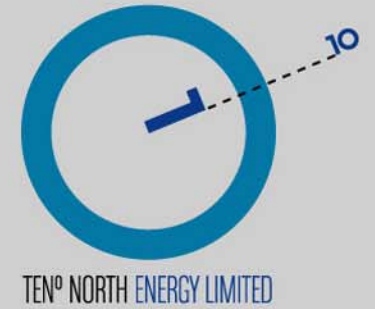


- Defined as a ratio of a measure of output to a measure of input (some or all of the resources) used to produce this output
- Different from Production which refers to a increase/decrease in output over a given period of time

# Why is Productivity Important?

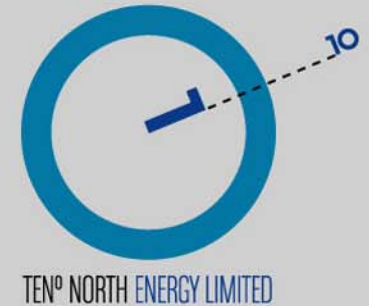


- Corporate management views productivity as a main indicator of efficiency when comparisons with competitors made.
- Governments stress the relationship between productivity, the standard of living, inflation and economic growth



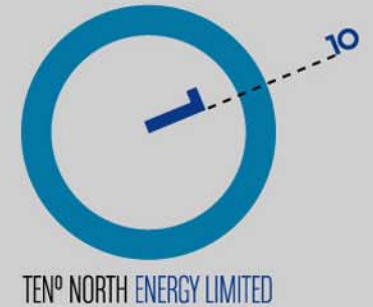
# Is Productivity on the decline in T&T?

# Issues



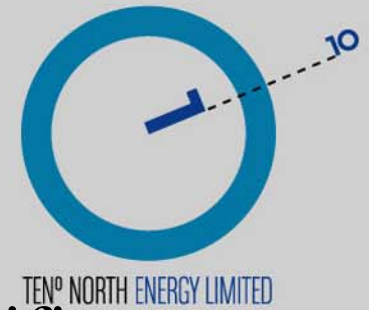
- Productivity statistics not readily available
- Different sectors – different productivity levels
- Different perceptions as to what constitutes productivity
  - Plant
  - Labor
  - Some combination of the above
- Result is we are not sure, however, anecdotal evidence suggests that Productivity is declining in certain sectors

# Energy Sector - Background



- Capital intensive
- Significant user and developer of new technology
- Shortages of technical, commercial and managerial staff – significant challenge even though not labour intensive
- Labor shortages driving up wages in other sectors – Dutch Disease

# Energy Sector - Productivity

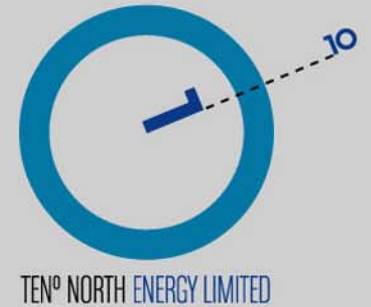


New technology and economies of scale having significant positive impact on productivity

- Exploration – seismic
- Production – horizontal wells, improved completions
- Downstream – bigger plants give improved conversion rates

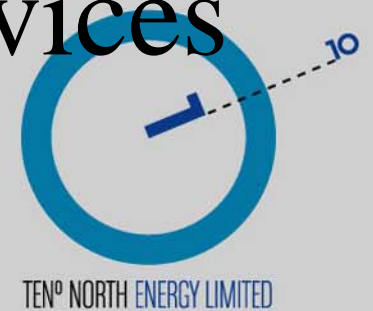
Technology impacts will mask labour productivity effects

# Energy Sector - HR shortages



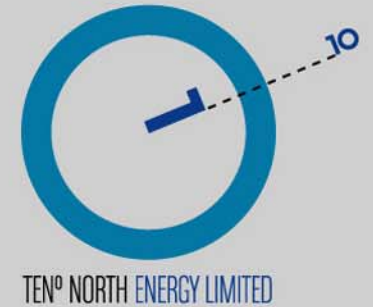
- Companies turning to technology
- Making do with less
- Projects being delayed
- Poaching of staff
- Salaries spiraling – Dutch disease
- Lower calibre of personnel – lower productivity

# Manufacturing, Agriculture, Services

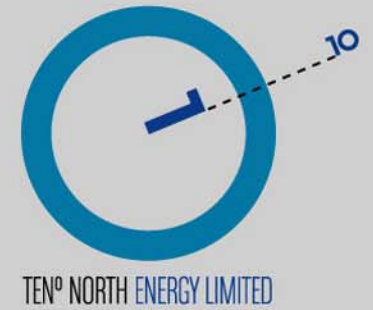


- Agriculture effectively dead – not considered
- Manufacturing
  - Increasing labour costs
  - Output flat, suggests declining productivity
- Service Sector
  - Increasing labour cost
  - Productivity was always felt low, no noticeable change

# Conclusions

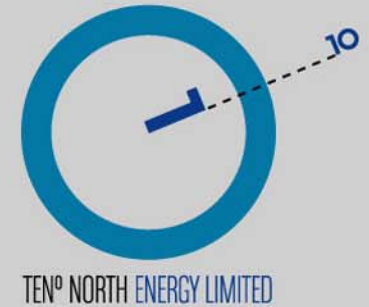


- Energy sector productivity as a whole increasing – impact of new technology
- Other sectors not clear but productivity likely to be on the decline given pressures on wages, raw materials, etc



# What can be done to improve Productivity?

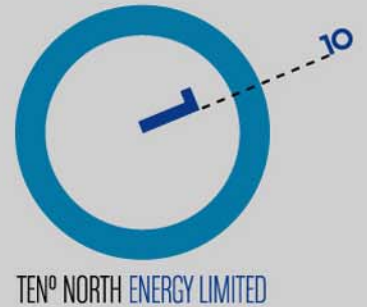
# Measure – Why?



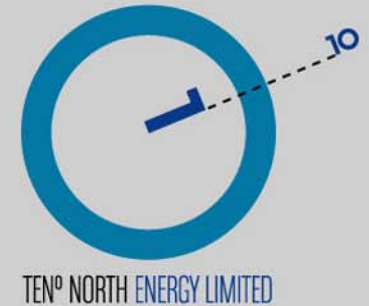
- For strategic purposes, performance comparison with competitors
- For tactical purposes, control the overall performance via the performance of sub-groups
- For planning purposes, compare the relative benefits accruing from the use of different inputs
- For internal management purposes, eg collective bargaining purposes

# Approaches

- Technology & systems
- Motivation of people
- Employee training and development
- Job design and organization
- Communications in the workplace

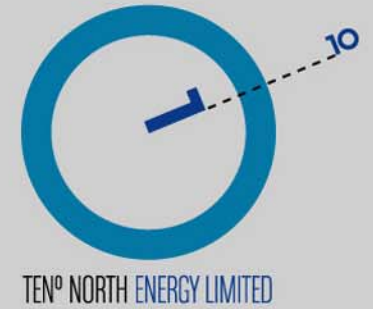


# Use of Technology, systems



- Rapidly changing marketplace – need to adapt and evolve quickly
- Studies have shown that flexible and adaptable organisations are most likely to succeed
- Studies have also shown that organisations using well proven technologies tend to adapt formal organisational structures which are less able to adapt to changes in the external environment
- Energy sector's use of technology to improve productivity resulting in less reliance on manpower (automated drilling)

# Motivation of People

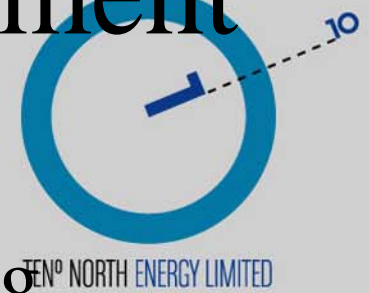


Job performance = F(motivation)(ability)

- Positive reinforcement/high expectations
- Effective discipline and punishment
- Treating people fairly
- Satisfying employee needs
- Setting work related goals
- Restructuring jobs
- Base rewards on job performance

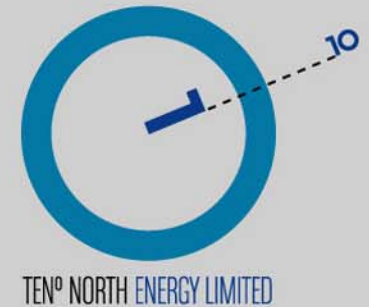
Motivation can be improved quickly

# Employee training and development



- Question is whether companies are spending enough on training of their people.
- Rise of tertiary educational establishments reflect strong desire by Trinbagonians to “better” themselves.
- Concern is many of the qualifications that employees gain are irrelevant and add little or no value to their performance.
- Greater collaboration between employee and employer needed when deciding on training

# Job Design and Organisation



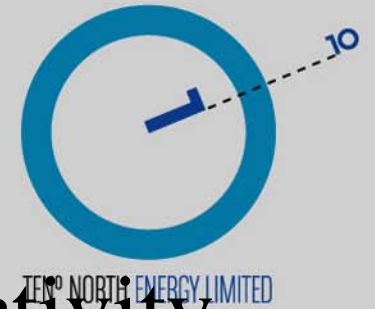
- Challenge is the optimum design of jobs and organizations to meet unsteady circumstances
- Too often we see old and archaic ways of working – not value adding
- Need to ask the question “Why am I doing this and what value does it add?”

# Communications in the Workplace



- We are poor communicators
- Communications are vital in management
  - Talking
  - Listening
  - Negotiating
  - Huddling
  - Wandering

# Conclusions



- Use of technology can improve productivity
- The human element is vital and must not be overlooked
- Challenge is to develop, train and motivate our employees