



## Transair Energy

### Project Input Data

Project Name : **YOUR PLANT**

2009-01-30

### Compressor Room

Pressure :

**115 psi**

Compressor power :

**100 kW**

Annual operating hours :

**8000 hours/year**

Type of dryer :

**by refrigeration**

### Compressed Air Network

Flow in the main ring :

**600 Scfm**

Length of the main ring :

**1000 ft**

Closed main ring :

**yes**

### Traditional solution

Pipe material :

**Black Steel**

Internal diameter of the pipe :

**3 inch**

Age of the network :

**15 years**

% of leakage :

**17 %**

Quotation (products and labour) :

**0 CAD**

### Transair

Diameter of the Transair pipe :

**63 mm**

Quotation (products and labour) :

**20000 CAD**

### Economic Data

Electricity cost per kWh :

**0.07 CAD**

Annual electricity inflation :

**2 %**

Energy tax per kWh :

**0 CAD**

Energy grant per kWh :

**0 CAD**

Electricity carbon emission factor :

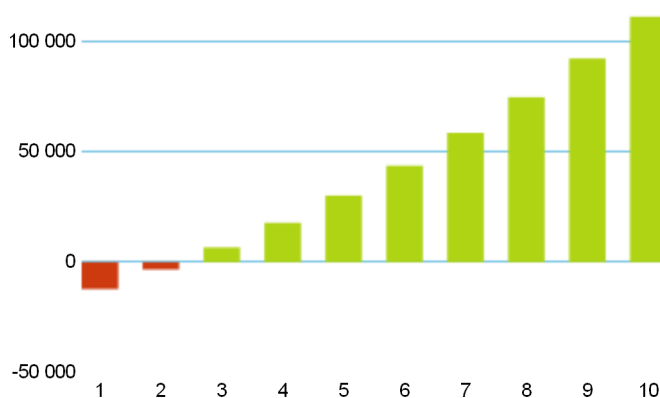
**0.08 kg CO2 / kWh**

### Estimation Output Data

Payback time of the Transair System : **14 months**

### TRANSAIR BENEFIT YEAR AFTER YEAR

due to the difference of cost between Transair and traditional solution



### Transair Profit For 5 year(s) : 50 232 CAD

For information, the estimated pressure drop and leakage volume saved each year with Transair is equivalent to **49 545 kg CO2**

<i>Black Steel</i>		
6,21 psi	Pressure drop	4,23 psi
<b>1 057 CAD</b>	<b>Pressure drop cost per year</b>	<b>709 CAD</b>
36 057 301 Cft	Leakage volume per year	891 342 Cft
<b>9 470 CAD</b>	<b>Leakage cost per year</b>	<b>234 CAD</b>
474 CAD	estimated repair cost per year	12 CAD
<b>11 001 CAD</b>	<b>Total Annual Cost</b>	<b>955 CAD</b>

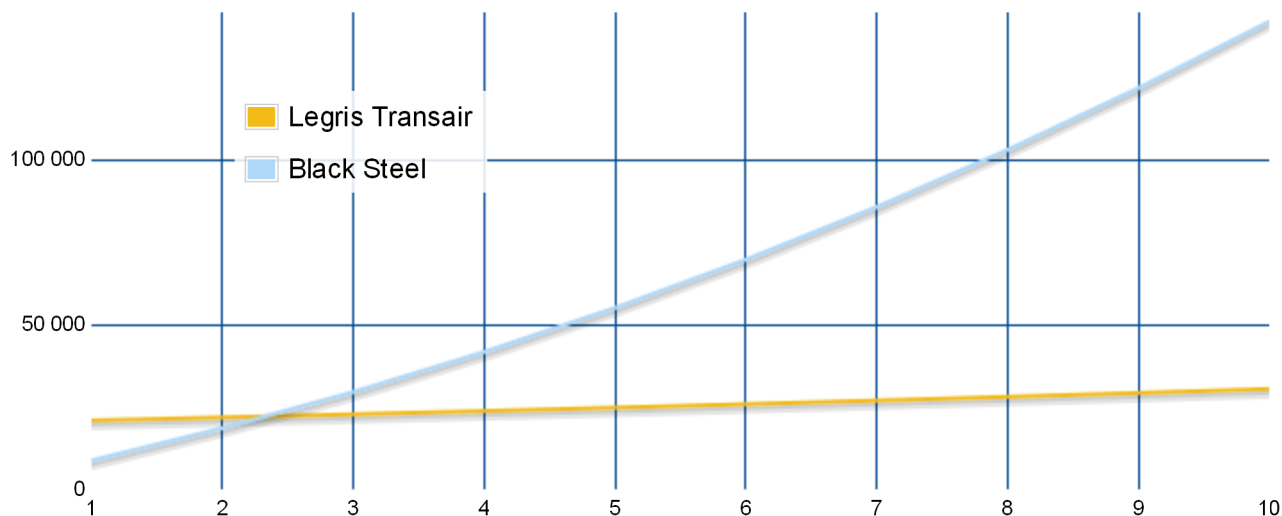


## Cumulative cost of the compressed air system year after year

Project : YOUR PLANT

Date : 2009-01-30

Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>legris transair</b> Investment	20 000 CAD				
<b>legris transair</b> Annual cost	884 CAD	901 CAD	919 CAD	937 CAD	955 CAD
<b>legris transair</b> Total cost	<b>20 884 CAD</b>	<b>21 803 CAD</b>	<b>22 757 CAD</b>	<b>23 747 CAD</b>	<b>24 773 CAD</b>
Investment	0 CAD				
<b>Black Steel</b> Annual cost	8 717 CAD	9 266 CAD	9 830 CAD	10 408 CAD	11 001 CAD
<b>Black Steel</b> Total cost	<b>8 717 CAD</b>	<b>18 533 CAD</b>	<b>29 490 CAD</b>	<b>41 632 CAD</b>	<b>55 005 CAD</b>
<b>Cumulative Report</b>	<b>-12 166 CAD</b>	<b>-3 270 CAD</b>	<b>6 732 CAD</b>	<b>17 885 CAD</b>	<b>30 232 CAD</b>
Year	Year 6	Year 7	Year 8	Year 9	Year 10
<b>legris transair</b> Investment					
<b>legris transair</b> Annual cost	972 CAD	990 CAD	1 008 CAD	1 025 CAD	1 043 CAD
<b>legris transair</b> Total cost	<b>25 833 CAD</b>	<b>26 929 CAD</b>	<b>28 060 CAD</b>	<b>29 227 CAD</b>	<b>30 429 CAD</b>
Investment					
<b>Black Steel</b> Annual cost	11 609 CAD	12 231 CAD	12 868 CAD	13 520 CAD	14 186 CAD
<b>Black Steel</b> Total cost	<b>69 652 CAD</b>	<b>85 616 CAD</b>	<b>102 943 CAD</b>	<b>121 676 CAD</b>	<b>141 859 CAD</b>
<b>Cumulative Report</b>	<b>43 818 CAD</b>	<b>58 687 CAD</b>	<b>74 883 CAD</b>	<b>92 449 CAD</b>	<b>111 430 CAD</b>



**THE PAYBACK OF THE TRANSAIR SYSTEM IS 14 MONTHS**

**EACH YEAR YOU WAIT BEFORE INSTALLING TRANSAIR YOU LOSE 10 046 CAD**