Financial Summary and MIURA Growth Strategy
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Caution

Each value mentioned in this document is based on the information currently available and the actual results may be changed and differ from what is stated herein, due to forthcoming various factors. The utmost care has been taken to provide the information publicized in this document. However, MIURA shall not be held responsible for any damages resulting from the information publicized in this document.
1. Company Profile
# Company Profile

**Name**: MIURA CO., LTD.

**Location**: 7 Horie, Matsuyama, Ehime

**Established**: May 1959

**Group company**
- **Japan**: 10 companies
- **Overseas**: 17 companies

*As of March 31, 2020

**Employees**
- Group total: 5,920
- 1,720 employees overseas included (29%)

**Business**
- Manufacturing, sale, and maintenance of equipment

**Rating**: “A” maintained as of December 2019

Publicized by Rating and Investment Information, Inc.

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## Consolidated Net Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>19/3</td>
<td>138,880</td>
<td>113,125</td>
</tr>
<tr>
<td>20/3</td>
<td>143,645</td>
<td>116,443</td>
</tr>
<tr>
<td>21/3 (Plan)</td>
<td>139,000</td>
<td>111,900</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>FY2018 Result</th>
<th>FY2019 Plan</th>
<th>FY2019 Result</th>
<th>FY2020 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (Million JPY)</td>
<td>138,880</td>
<td>144,000</td>
<td>143,645</td>
<td>139,000</td>
</tr>
<tr>
<td>Operating profit (Million JPY)</td>
<td>16,682</td>
<td>17,500</td>
<td>18,540</td>
<td>15,000</td>
</tr>
<tr>
<td>Profit before income taxes (Million JPY)</td>
<td>17,130</td>
<td>17,800</td>
<td>18,756</td>
<td>15,300</td>
</tr>
<tr>
<td>Profit attributable to owners of parent (Million JPY)</td>
<td>12,280</td>
<td>12,800</td>
<td>13,746</td>
<td>11,000</td>
</tr>
<tr>
<td>Basic earnings per share (JPY)</td>
<td>109.10</td>
<td>113.71</td>
<td>122.01</td>
<td>97.63</td>
</tr>
</tbody>
</table>
2. FY2019 Summary Overview
## FY2019 Summary Overview

### Results

<table>
<thead>
<tr>
<th></th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>138,880</td>
<td>143,645</td>
<td>139,000</td>
</tr>
<tr>
<td><strong>Cost of revenue</strong></td>
<td>84,369</td>
<td>86,283</td>
<td>84,000</td>
</tr>
<tr>
<td><strong>Selling, general, and administrative expenses</strong></td>
<td>38,500</td>
<td>39,320</td>
<td>40,500</td>
</tr>
<tr>
<td><strong>Other income</strong></td>
<td>799</td>
<td>612</td>
<td>550</td>
</tr>
<tr>
<td><strong>Other expenses</strong></td>
<td>127</td>
<td>113</td>
<td>50</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td>16,682</td>
<td>18,540</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Profit before income taxes</strong></td>
<td>17,130</td>
<td>18,756</td>
<td>15,300</td>
</tr>
<tr>
<td><strong>Profit attributable to owners of parent</strong></td>
<td>12,280</td>
<td>13,746</td>
<td>11,000</td>
</tr>
</tbody>
</table>

### Overview

**Japan**

- Boiler and marine business staying buoyant thanks to robust capital investment
- Equipment sales: Stable in renewing and maintaining existing facilities
- Marine equipment: Good performance overall including BWMS
- Laundry business: Weak performance due to new investment decrease

**Overseas**

- **Americas, Korea, Taiwan, and ASEAN**: Strong sales
- **China**: Sluggish equipment sales but maintenance staying solid
FY2019 Summary Overview

Analysis

[Sales revenue]

<table>
<thead>
<tr>
<th></th>
<th>Plan</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan Boilers, etc.</td>
<td>1,440</td>
<td>1,436</td>
</tr>
<tr>
<td>Laundry business</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Overseas</td>
<td>1,440</td>
<td>1,436</td>
</tr>
</tbody>
</table>

[Unit: 100 million JPY]

[Pretax profit]

<table>
<thead>
<tr>
<th></th>
<th>Plan</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower earning effect</td>
<td>178</td>
<td>187</td>
</tr>
<tr>
<td>Expense reduction</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Other (exchange rate, etc.)</td>
<td>Δ1</td>
<td>Δ1</td>
</tr>
</tbody>
</table>

[Unit: 100 million JPY]
2 FY2019 Summary Overview

Domestic and Overseas Sales (IFRS)

Unit: 100 million JPY

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas</th>
<th>Japan</th>
<th>Overseas Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>19/3</td>
<td>1,130</td>
<td>1,388</td>
<td>18.6%</td>
</tr>
<tr>
<td>20/3</td>
<td>1,164</td>
<td>1,436</td>
<td>18.9%</td>
</tr>
<tr>
<td>21/3 (Plan)</td>
<td>1,119</td>
<td>1,390</td>
<td>19.5%</td>
</tr>
</tbody>
</table>

Note: All ratios are calculated based on the domestic sales.
FY2019 Summary Overview

Analysis of Japan Domestic Sales

Unit: 100 million JPY

Good performance overall including BWMS

Weak performance due to new investment decrease
## Analysis of Overseas Sales in Local Currency

<table>
<thead>
<tr>
<th>Country</th>
<th>Unit</th>
<th>2018/3</th>
<th>2019/3</th>
<th>2020/3</th>
<th>± from the previous period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>10 thousand CAD</td>
<td>1,014</td>
<td>940</td>
<td>1,067</td>
<td>↑</td>
</tr>
<tr>
<td>US</td>
<td>10 thousand USD</td>
<td>2,844</td>
<td>2,833</td>
<td>3,246</td>
<td>↑</td>
</tr>
<tr>
<td>Mexico</td>
<td>10 thousand MXN</td>
<td>-</td>
<td>8,503</td>
<td>12,432</td>
<td>↑</td>
</tr>
<tr>
<td>Brazil</td>
<td>10 thousand BRL</td>
<td>1,014</td>
<td>1,904</td>
<td>2,449</td>
<td>↑</td>
</tr>
<tr>
<td>Korea</td>
<td>100 million KRW</td>
<td>694</td>
<td>739</td>
<td>882</td>
<td>↑</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Million TWD</td>
<td>333</td>
<td>512</td>
<td>578</td>
<td>↑</td>
</tr>
<tr>
<td>China</td>
<td>Million CNY</td>
<td>497</td>
<td>541</td>
<td>542</td>
<td>↑</td>
</tr>
<tr>
<td>Singapore</td>
<td>10 thousand SGD</td>
<td>784</td>
<td>791</td>
<td>800</td>
<td>↑</td>
</tr>
<tr>
<td>Indonesia</td>
<td>100 million IDR</td>
<td>1,044</td>
<td>1,290</td>
<td>1,434</td>
<td>↑</td>
</tr>
<tr>
<td>Turkey</td>
<td>10 thousand TRY</td>
<td>-</td>
<td>-</td>
<td>504</td>
<td>↑</td>
</tr>
<tr>
<td>Thailand</td>
<td>Million THB</td>
<td>154</td>
<td>199</td>
<td>212</td>
<td>↑</td>
</tr>
</tbody>
</table>
### Analysis of Overseas Sales Increase

**Unit: 100 million JPY**

<table>
<thead>
<tr>
<th>Currency</th>
<th>Average exchange rate (FY2018)</th>
<th>Average exchange rate (FY2019)</th>
<th>Increase rate</th>
<th>FY2020 Plan</th>
<th>Increase rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>110.92</td>
<td>108.70</td>
<td>-2.0%</td>
<td>108.00</td>
<td>-0.6%</td>
</tr>
<tr>
<td>CAD</td>
<td>84.60</td>
<td>81.73</td>
<td>-3.4%</td>
<td>76.50</td>
<td>-6.4%</td>
</tr>
<tr>
<td>CNY</td>
<td>16.54</td>
<td>15.60</td>
<td>-5.7%</td>
<td>15.00</td>
<td>-3.8%</td>
</tr>
<tr>
<td>KRW (100 W)</td>
<td>9.98</td>
<td>9.21</td>
<td>-7.7%</td>
<td>8.90</td>
<td>-3.4%</td>
</tr>
<tr>
<td>IDR (100 Rp)</td>
<td>0.78</td>
<td>0.77</td>
<td>-1.3%</td>
<td>0.70</td>
<td>-9.1%</td>
</tr>
<tr>
<td>NTD</td>
<td>3.64</td>
<td>3.54</td>
<td>-2.7%</td>
<td>3.60</td>
<td>1.7%</td>
</tr>
<tr>
<td>BRL</td>
<td>29.37</td>
<td>26.52</td>
<td>-9.7%</td>
<td>21.00</td>
<td>-20.8%</td>
</tr>
<tr>
<td>THB</td>
<td>3.43</td>
<td>3.51</td>
<td>2.3%</td>
<td>3.30</td>
<td>-6.0%</td>
</tr>
</tbody>
</table>

**Income decrease due to currency exchange fluctuations forecasted**

**19/3**
- Currency exchange: Δ15
- Actual increase: 29

**20/3**
- Currency exchange: Δ9
- Actual increase: 8

**21/3 (Plan)**
- Currency exchange
- Actual increase: 8
FY2019 Summary Overview

Overseas Sales

Unit: 100 million JPY

Affected by US-China trade war

Americas: 49, 57, 56
Korea: 74, 81, 79
China: 90, 85, 90
ASEAN & Taiwan: 45, 49, 46

19/3, 20/3, 21/3 (Plan)
2 FY2019 Summary Overview

Analysis of Overseas Sales in Local Currency

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Korea</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 thousand USD</td>
<td>100 million KRW</td>
<td>Million CNY</td>
</tr>
<tr>
<td>19/3</td>
<td>2,833</td>
<td>739</td>
<td>541</td>
</tr>
<tr>
<td>20/3</td>
<td>3,246</td>
<td>882</td>
<td>542</td>
</tr>
<tr>
<td>21/3 (Plan)</td>
<td>3,347</td>
<td>888</td>
<td>600</td>
</tr>
</tbody>
</table>

*Mexico became a consolidated company and its intercompany sale has not been included since FY2018.*
### Facility Investment

**Facility investment trend**

Unit: Million JPY

<table>
<thead>
<tr>
<th>Year/Plan</th>
<th>18/3</th>
<th>19/3</th>
<th>20/3</th>
<th>21/3 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2017</td>
<td>5,250</td>
<td>4,478</td>
<td>4,570</td>
<td>4,715</td>
</tr>
</tbody>
</table>

**Depreciation and amortization trend**

Unit: Million JPY

<table>
<thead>
<tr>
<th>Year/Plan</th>
<th>18/3</th>
<th>19/3</th>
<th>20/3</th>
<th>21/3 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2017</td>
<td>3,645</td>
<td>3,673</td>
<td>3,592</td>
<td>3,781</td>
</tr>
</tbody>
</table>

*Right-of-use assets are not included.

### Our facility investment

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Project Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2017</td>
<td>Multipurpose factory MIURA I LAND</td>
</tr>
<tr>
<td></td>
<td>MIURA I LAND Second factory in China</td>
</tr>
<tr>
<td></td>
<td>MIURA I LAND</td>
</tr>
<tr>
<td></td>
<td>Air conditioning facility renovation in HQ building</td>
</tr>
<tr>
<td>FY2018</td>
<td>MIURA I LAND Second factory in China</td>
</tr>
<tr>
<td>FY2019</td>
<td>Second factory in China</td>
</tr>
<tr>
<td>FY2020 (Plan)</td>
<td>New construction of Shizuoka branch</td>
</tr>
</tbody>
</table>
Sales Plan Revision of BWMS

USCG TA obtained October 2019

First manufacturer in Japan to obtain the type approval certificate for its system using the filtration method with UV treatment (by MIURA’s own research)

Target sales number of units: 1,200 units in total (end of fiscal 2020)
3. Profit Share and Stock
3 Profit Share and Stock

① Sustaining stable dividends
② Targeting 30% consolidated payout ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2019</td>
<td>16 yen</td>
<td>21 yen</td>
</tr>
<tr>
<td>FY2020</td>
<td>16 yen</td>
<td>21 yen</td>
</tr>
<tr>
<td>Total</td>
<td>37 yen</td>
<td>30 yen</td>
</tr>
</tbody>
</table>

【Changes in dividend per share】

【Reference】
Total number of issued shares (excluding treasury shares)
112,696,195 shares
Treasury shares
12,594,917 shares
As of March 31, 2020

Management target:
ROE 10% or more
4. Mid-term Management Plan for FY2020
# Mid-term Management Plan for FY2020

## Mid-term Management Planning

- **Ideal business model three years ahead**
- **Business environment change**
- **Plan for next FY**
- **Mid-term management plan for coming years**
- **Annual correction in response to economic fluctuations**

### Rolling plan

To respond to business environment change, MIURA updates its three-year mid-term management plan every year.

<table>
<thead>
<tr>
<th></th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mid-term management plan 2018</strong></td>
<td></td>
<td></td>
<td>2018–2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mid-term management plan 2019</strong></td>
<td></td>
<td></td>
<td>2019–2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mid-term Management Plan 2020</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2020–2022</td>
</tr>
</tbody>
</table>
## Mid-term Management Plan for FY2020

### Summary

<table>
<thead>
<tr>
<th></th>
<th>FY2019 Result</th>
<th>FY2020 Plan</th>
<th>FY2021 Plan</th>
<th>FY2022 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>1,436</td>
<td>1,390</td>
<td>1,515</td>
<td>1,648</td>
</tr>
<tr>
<td>Operating profit</td>
<td>185</td>
<td>150</td>
<td>183</td>
<td>204</td>
</tr>
<tr>
<td>Operating profit rate</td>
<td>12.9%</td>
<td>10.8%</td>
<td>12.1%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Unit: 100 million JPY

### Overseas vs. Japan

<table>
<thead>
<tr>
<th>Period</th>
<th>Overseas</th>
<th>Japan</th>
<th>Overseas ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/3</td>
<td>272</td>
<td>1,164</td>
<td>18.9%</td>
</tr>
<tr>
<td>21/3 (Plan)</td>
<td>271</td>
<td>1,119</td>
<td>19.5%</td>
</tr>
<tr>
<td>22/3 (Plan)</td>
<td>330</td>
<td>1,185</td>
<td>21.8%</td>
</tr>
<tr>
<td>23/3 (Plan)</td>
<td>388</td>
<td>1,260</td>
<td>23.5%</td>
</tr>
</tbody>
</table>

Unit: 100 million JPY
## Mid-term Management Plan for FY2020

### By Business Category

<table>
<thead>
<tr>
<th></th>
<th>FY2019 Result</th>
<th>FY2020 Plan</th>
<th>FY2021 Plan</th>
<th>FY2022 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Japan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiler</td>
<td>635</td>
<td>635</td>
<td>666</td>
<td>682</td>
</tr>
<tr>
<td>Aqua (Water treatment equipment)</td>
<td>40</td>
<td>39</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>Marine equipment</td>
<td>114</td>
<td>121</td>
<td>126</td>
<td>138</td>
</tr>
<tr>
<td>Food &amp; Medical equipment</td>
<td>113</td>
<td>111</td>
<td>126</td>
<td>134</td>
</tr>
<tr>
<td>Laundry equipment</td>
<td>190</td>
<td>141</td>
<td>148</td>
<td>178</td>
</tr>
<tr>
<td>Others (Special equipment, New business, Environmental business, etc.)</td>
<td>72</td>
<td>72</td>
<td>78</td>
<td>82</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,164</td>
<td>1,119</td>
<td>1,185</td>
<td>1,260</td>
</tr>
<tr>
<td><strong>Overseas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Americas (US, Canada, Mexico, Brazil)</td>
<td>57</td>
<td>56</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td>Korea</td>
<td>81</td>
<td>79</td>
<td>80</td>
<td>87</td>
</tr>
<tr>
<td>China</td>
<td>85</td>
<td>90</td>
<td>124</td>
<td>159</td>
</tr>
<tr>
<td>ASEAN, etc.</td>
<td>49</td>
<td>46</td>
<td>59</td>
<td>67</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>272</td>
<td>271</td>
<td>330</td>
<td>388</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,436</td>
<td>1,390</td>
<td>1,515</td>
<td>1,648</td>
</tr>
</tbody>
</table>

Unit: 100 million JPY
Mid-term Management Plan for FY2020

Japan: continuous growth maintained by offering total solutions
Overseas: affected by China issues

<table>
<thead>
<tr>
<th></th>
<th>Previous plan</th>
<th>Present plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating profit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Net sales

Unit: 100 million JPY

Operating profit

Unit: 100 million JPY

19/11 disclosure | 19/5 disclosure | 20/5 disclosure | 20/5 disclosure |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,173</td>
<td>1,184</td>
<td>1,219</td>
<td>1,260</td>
</tr>
</tbody>
</table>

20/3 Plan 21/3 Plan 22/3 Plan 23/3 Plan

19/11 disclosure | 19/5 disclosure | 20/5 disclosure | 20/5 disclosure |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>175</td>
<td>185</td>
<td>195</td>
<td>204</td>
</tr>
</tbody>
</table>
5. Current China and Future Strategy
Sales in China

November 5, 2019
The forecast about China at the end of this fiscal year was reduced by 1.8 billion yen and revised to 8.7 billion yen. (No revision to the total sales of MIURA group)

Reasons for result fluctuation

① COVID-19
- Limited sales and maintenance activities
- Restrictions to transport

② US-China trade war
- Investment enthusiasm dampened
- Shifting our targets to food industry

③ Worsening economy in China
Eased penalties regarding environmental regulations and postponed improvement timing

Strong maintenance
Low NOx burner modification increase
Current China and Future Strategy

Current and Future Market Trend

COVID-19

Economy worsening in China + US-China trade war

Restraining facility investment to wait and see

- Financing for companies
- Social insurance support (for 5 months)
- Governmental rent assistance (State-owned: 2 months, private-owned: 1 month)

Financial aid for COVID-19 is now a high priority
- Sluggish economic activities
- Sense of economic downturn

Tightening environmental regulation cannot be expected

Result

Economic prioritized; coal consumption extended

Postponement of replacement with gas-fired boiler

Ban on wood-pellet boiler use stopped except for urban areas

Postponement of wood-pellet boiler replacement with gas-fired boiler

- Depression among exporting companies
- Bankruptcy of small and medium sized companies
- Market takeover by large companies
Current China and Future Strategy

Two-Step Environmental Regulation

In major cities, NOx regulation compliance is almost completed in 2020. From 2021, rural cities are to follow it.

Gas pipe line from Russia to be connected in December → Environmental regulation postponed due to COVID-19 (Northeast China)

Main strategy:
Gas boiler replacement in booming industries
- Low NOx burner modification in the maintenance field is booming.
  → A profitability increasing factor
- Gas-to-gas sales promotion
  → Energy saving proposal based on load and diary analysis to promote boiler replacement

Stepwise regulation

Step 1
- Soot PM2.5
- Coal to gas → Northeast China

Step 2
- NOx
- Low NOx
- Rural area (urban areas partially)
Boiler Market Change in China (January to December)

Comparison between FY2018 and FY2019

Total boilers sold: **54.0% down**

- Boiler sales significantly decreased due to economic downturn; gas burner modification predominates instead.
- Sale of steam generator increase

Gas-fired boilers sold: **7% down**

Strategy changed to burner replacement of other gas-fired boilers
Current China and Future Strategy

Boilers Related to Environmental Regulations from 2019 to 2021

Coal regulation

<table>
<thead>
<tr>
<th>Year</th>
<th>Potential Market</th>
<th>MIURA's Target</th>
<th>MIURA's Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2019</td>
<td>2,634</td>
<td>736</td>
<td>196</td>
</tr>
<tr>
<td>FY2020</td>
<td>2,722</td>
<td>759</td>
<td>214</td>
</tr>
<tr>
<td>FY2021</td>
<td>2,783</td>
<td>780</td>
<td>0</td>
</tr>
</tbody>
</table>

NOx regulation

<table>
<thead>
<tr>
<th>Year</th>
<th>Potential Market</th>
<th>MIURA's Target</th>
<th>MIURA's Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2019</td>
<td>2,684</td>
<td>620</td>
<td>214</td>
</tr>
<tr>
<td>FY2020</td>
<td>2,544</td>
<td>823</td>
<td>737</td>
</tr>
<tr>
<td>FY2021</td>
<td>2,076</td>
<td>737</td>
<td>0</td>
</tr>
</tbody>
</table>

Low NOx strategy (Changeover to MIURA)

Burner modification increase
Analysis on MIURA Boiler Installation Category and Destinations

Changeover to MIURA
Low NOx + Energy saving proposal

(Million JPY)

<table>
<thead>
<tr>
<th>Category</th>
<th>18/3</th>
<th>19/3</th>
<th>20/3 (Plan)</th>
<th>20/3 (Result)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas to Gas</td>
<td>316</td>
<td>557</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal/bio to Gas</td>
<td>1,580</td>
<td>2,220</td>
<td>1,624</td>
<td>1,751</td>
</tr>
<tr>
<td>New installation</td>
<td>3,980</td>
<td>2,452</td>
<td>3,396</td>
<td>2,204</td>
</tr>
<tr>
<td>Additional installation</td>
<td>923</td>
<td>480</td>
<td>574</td>
<td></td>
</tr>
</tbody>
</table>

**MIURA’s target**

- **New installation increased**
  - Market takeover by large companies due to bankruptcy of small and medium sized companies
  - Plant relocation increase due to drainage regulation and chemical plant regulation
Gas-to-Gas Sales Reinforcement

Analyzing loads and boiler reports of other companies’ boilers to propose more efficient systems

Note: Cases whose analysis and contract conclusion took place in different years are included above.
Current China and Future Strategy

Boiler Market in China (Industry Analysis)

(Million JPY)

- Industries not affected by US-China trade war and COVID-19

Target
- Food industry ↑
- Pharmaceuticals ↑
- Corrugated cardboard → Feed industry

Food and pharmaceutical industries occupy 41% of all.

Diagram:
- Food
- Pharmaceuticals
- Corrugated cardboard
- Feed
- Beer
- Chemical plant
- Fiber/Dyeing
- Steel/Machine
- Other

Food industry and pharmaceuticals have seen growth, with food and pharmaceutical industries occupying 41% of the market. The market analysis shows a trend in industries not affected by US-China trade war and COVID-19, with a focus on food, pharmaceuticals, and steel/machine sectors.
New Factory

New factory under construction (as of April 2020)

Completes in May 2020, Operates in August

Aiming at 5,000 units annual production for gas-to-gas boiler replacement regarding upgrade infrastructure after economic recovery.
Company Profile

History

1959: Incorporation. Full scale production of the Z boiler began.
1972: Development of high efficiency boiler. ZMP Contract started.
1974: Development of gas-fired boiler with Tokyo Gas Company
1977: Commercialization of the MI (Multiple Installation) system
1978: Diversified business started
1982: Listed shares on the 2nd Section of the Osaka Securities Exchange
1974: Development of gas-fired boiler with Tokyo Gas Company
1977: Commercialization of the MI (Multiple Installation) system
1982: Listed shares on the 2nd Section of the Osaka Securities Exchange
1984: Listed shares on the 2nd Section of the Tokyo Stock Exchange
1986: Patent received for the MI system
1989: Listed shares on the 1st Sections of the Tokyo and Osaka Stock Exchange
1984: Listed shares on the 2nd Section of the Tokyo Stock Exchange
1986: Patent received for the MI system
1991: Development of low NOx boiler
2004: Sale of SQ-2500ZS, the world’s first gas-fired boiler with an NOx value of 25 ppm begun
2017: Acquisition of a laundry business company

FY2020 sales target: 139 billion yen

Growth period of boiler business

Initial period of boiler business

Growth period of diversified business

Initial period of diversified business

Initial period of the Best Partner Strategy

Rearing period of globalization

Growth period of total solution and globalization

(Million JPY)

150,000
120,000
90,000
60,000
30,000
0


ZMP contract introduce

MI system

MI system sale begun

Online maintenance started

Acquisition of a laundry business company
Domestic Business

Domestic Share  *Boilers for power generation excluded  *By MIURA’s own research as of March 2019

Steam boiler market in Japan

- Water tube boiler
- Fire tube boiler
- Once-through boiler

Total amount of steam output of the market
Approx. 200,000 t/h
(Note) Estimated value

77%
15%
8%

Once-through boiler market in Japan

- MIURA
- Other companies

Total amount of steam output
Approx. 150,000 t/h
(Note) Estimated value

Share No.1 58.7%

“Once-through-ism” movement

- District heating and cooling (DHC)
- Cardboard/paper mill
- Japan railway / other private railways
- In-house power generation (boilers of Electricity Business Act)
About the Boiler

Why Steam?

Efficiency 95%

Feed heat through steam

Stein am kneader
Produces side dishes, soup, jam, paste, etc.

Drain

Utilize heat efficiently

Exhaust gas

95%

Efficiency 30%

30%

70%
About the Boiler

Example of Using Steam (Direct Heating)

Once-through boiler

Foot bath

“It’s warm!”

Pump
**Example of Using Steam (Indirect Heating)**

- **Steam kneader**: Stirs ingredients with turning blades. Produces side dishes, soup, jam, paste, etc.
- **Coating process**: Uses a dryer with a spiral fin tube to apply coatings.
- **Dyeing process**: Utilizes a dryer with a corrugated tube to apply dyes.
- **Plating process**: Involves a dryer with a corrugated tube for plating.

**About the Boiler**

- **Steaming method**: Indirect heating.
- **Process**: Stirs ingredients with turning blades and uses hot air for coating, dyeing, and plating.
Maintenance for Steam Boiler

**Greatest enemy for the boiler**

1. **Corrosion** → **Pitting in the vessel**
   - Removal of Dissolved Oxygen
   - DOR

   **Vacuuming**

   ![Diagram showing the process](image)

   **Deoxygenated water**

2. **Scale** → Lower boiler efficiency or Rupture of water pipes
   → **Water softener**

   ![Diagram showing water softener](image)

   **Raw water** → **Ca, Mg** → **Soft water (Scale prevention)**

   **Ion exchange resin**
About the Boiler

Maintenance for Steam Boiler

Steam boiler

Condensing scale

Hot water boiler

Blowdown

Hard to build scale, as the all water drains.

Vertical section of a pipe

1000°C

Scale buildup

200°C

1000°C

Puncture

Vertical section of a pipe

400°C

A pipe melts.

Scale insulates heat.
Types of boilers — Same capacity

- Once-through boiler
- Water tube boiler
- Fire tube boiler
What is Multiple Installation (MI) System?

MIURA MI (Multiple Installation) System

Provides steam of required amount when needed, reducing operation costs and emission of CO₂ and NOx.

- **Energy Saving**
- **Space Saving**
- **Labor Saving**
- **Low pollution**

**Why is MI system efficient?**

- One large capacity boiler
- Small capacity boilers in MI system

Same water content even if the number of potatoes reduced

Water content reduced when the number of potatoes reduced
What is Multiple Installation (MI) System?

MI System Patented in 1986

MI System
An epoch-making power-saving system utilizing once-through boilers.

- Energy-saving
- Space-saving
- Labor-saving
- Low pollution

Provides required steam when needed, leading to low operation costs and reduction of CO₂ and NOx.
ZMP Contract

Online Maintenance

Maintaining high profitability with “IoT” for 29 years

Remote monitoring
Not on-site
Trouble factor grasped
Preparation in advance
Early recovery

Monitoring

Troubleshooting via Telephone (Data collection/analysis)
Approx. 65,000 units under contract *including equipment other than boiler (As of March 2020)

Visit

Much more effective, easier maintenance work
What will we offer for the matured market in Japan?

Maximize efficiency in Boiler

Improve energy efficiency throughout the factory

Unutilized heat Recovery equipment

Steam driven air compressor

Exhaust gas boiler

Other than boilers:
- Water treatment equipment
- Food processing equipment
- Medical equipment
- Laundry equipment

Marine equipment:
- Marine boilers
- BWMS
Domestic Sales Strategy

Ballast water problem “A new market born”

“Ballast water” is the seawater taken into a ship’s tank to provide stability to the ship.

- **Port of unloading**
  - Water filled
  - No load
  - Ballast tank
  - Aquatic organisms

- **Sailing**
  - 3 to 4 billion ton seawater transferred per annum

- **Port of loading**
  - Full load
  - Water discharged
  - Ecosystem destruction

Aquatic organisms transferred from the port of unloading to that of loading

Environmental problems such as ecosystem destruction

Reference: document issued by the MLIT

The Ballast Water Management Convention (adopted in 2004) → Installation of ballast water treatment equipment is obliged

- Obligatory since Sep. 2017
- Obligatory since Sep. 2019

- Newly built ships
- Existing ships
What is a district heating and cooling (DHC) system?

A system to provide air conditioning and hot water to whole buildings such as commercial facilities and apartment houses in the district.

---

General air conditioning method in each building

- Outdoor unit
- Outdoor unit
- Heating and cooling facility

DHC method

- DHC center
- Supply
- Integration of heat supply facilities
- Energy saving encouragement
International Sales Strategy

Boiler Market Share

*Boilers for power generation excluded
*Based on total amount of steam output by MIURA’s own research as of March 2019

- **Japan**: Approx. 200,000 t/h, MIURA's share 40%
- **Korea**: Approx. 175,000 t/h, 8%
- **ASEAN**: Approx. 150,000 t/h, 2%
- **US**: Approx. 430,000 t/h, 2%
- **China**: Approx. 1,080,000 t/h, 1.4%

Mainly Large, Low-efficiency boilers

80% of the market is coal-fired boilers which is rapidly switching over to natural gas.
MIURA’s Network

- **Russia**: Handles Russian domestic market and exports to countries adopting GOST standards.
- **Russia**: Handles Russian domestic market and exports to countries adopting GOST standards.
- **MIURA INDUSTRIES (CHINA) CO., LTD.**: Handles Chinese domestic market and exports to ASEAN.
- **MIURA CANADA CO., LTD.**: Handles Canada domestic market and exports to USA.
- **MIURA TURKEY HEATING SYSTEMS INDUSTRY CO., LTD.**: Looks toward the European and CIS country markets.
- **MIURA AMERICA CO., LTD.**: Covers North America market and exports to Latin America.
- **MIURA NETHERLANDS B.V.**: Provides services to Shipowners in Europe.
- **MIURA AMERICA CO., LTD.**: Covers North America market and exports to Latin America.
- **MIURA TAIWAN ENG CO., LTD.**: Handles Taiwanese market and exports to ASEAN.
- **MIURA TAIWAN ENG CO., LTD.**: Handles Taiwanese market and exports to ASEAN.
- **KOREA MIURA CO., LTD.**: Handles Korean domestic market and exports to Russia.
- **MIURA TAIWAN ENG CO., LTD.**: Handles Taiwanese market and exports to ASEAN.
- **MIURA BOILER BRAZIL LTD.**: Started manufacturing in 2016.
- **MIURA CANADA CO., LTD.**: Handles Canada domestic market and exports to USA.
- **MIURA BOILER MEXICO S.A. DE C.V.**: Provides solutions for the Mexican domestic market.
- **Sri Lanka**: Provides sales and maintenance services through appointed dealers.
- **MIURA INDUSTRIES (THAILAND) CO., LTD.**: Provides solutions for the Thai domestic market.
- **MIURA BOILER MEXICO S.A. DE C.V.**: Provides solutions for the Mexican domestic market.
- **MIURA SINGAPORE CO PTE.LTD.**: An ASEAN hub office.
- **MIURA CO., LTD.**: An ASEAN hub office.
- **MIURA BOILER BRAZIL LTD.**: Started manufacturing in 2016.
- **Cambodia**: Sells products from Thailand and provides maintenance services through local dealers.
- **Cambodia**: Sells products from Thailand and provides maintenance services through local dealers.
- **Philippines**: Support areas nearby Metro Manila.
- **Philippines**: Support areas nearby Metro Manila.
- **Vietnam**: Provides solutions for the Vietnam domestic market.
- **Maruse Engineering (V) CO., LTD.**: Establishes offices in major cities.
- **Maruse Engineering (V) CO., LTD.**: Establishes offices in major cities.
- **Myanmar**: Expands support areas from Yangon.
- **Myanmar**: Expands support areas from Yangon.
- **Bangladesh**: Provides sales and maintenance services mainly in Dhaka.
- **Bangladesh**: Provides sales and maintenance services mainly in Dhaka.
- **MIURA BOILER MALAYSIA SDN.BHD.**: Provides sales and maintenance services of boilers complying with ASME standards.
- **MIURA BOILER MALAYSIA SDN.BHD.**: Provides sales and maintenance services of boilers complying with ASME standards.
- **Chile**: Provides sales and maintenance by alliance partners.

*As of March 2020*
Basic Capital Policy

Here is the basic capital policy of the Miura Group specified to improve our corporate value in the medium- and long-term over the ensured financial soundness.

**Capital efficiency improvement**
Regarding that steady profit increase regardless of the market environment leads to corporate value increase and shareholder’s interest improvement, MIURA aims to achieve **Return on Equity (ROE) of 10% or more** steadily.

**Sustainable and stable return to shareholders**
Not only the continuation of stable dividends but also the fair return of profit based on the company’s performance is ideal. We strive to increase the level of dividends, **setting the consolidated dividend payout ratio of 30% as a benchmark** and comprehensively taking our consolidated results and financial conditions into account.
The Best Partner of Energy, Water and Environment

Contact

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FAX 089-979-7011
URL http://www.miuraz.co.jp