



IMPLEMENTING AGENCY OF MONGOLIAN GOVERNMENT  
MINERAL RESOURCES AND PETROLEUM AUTHORITY



# MINERAL RESOURCES AND PETROLEUM STATISTICS 2022/11

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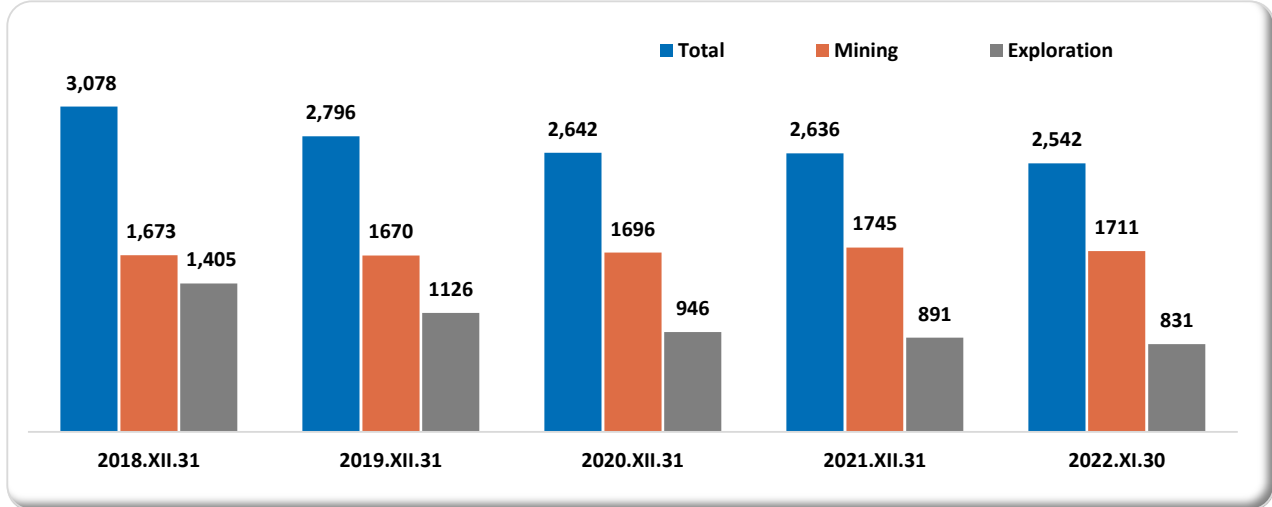
# 1 MINING AND EXPLORATION LICENSES

## 1.1. NUMBER OF VALID LICENSES AND AREA SIZE, 2022.XI.30, by provinces

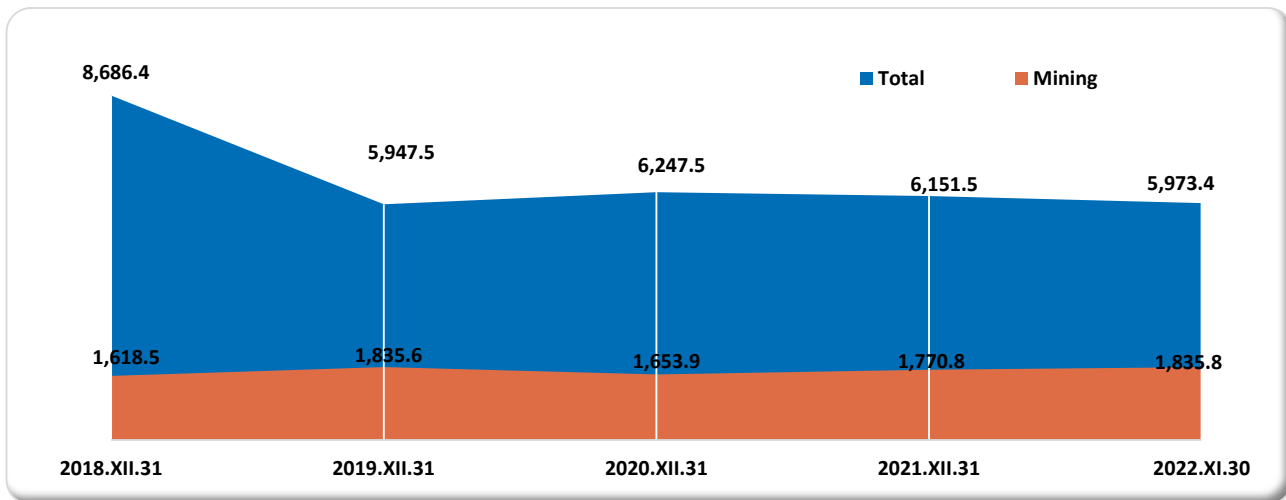
|              | TOTAL              |                    |                            | Of which:          |                    |                            |                    |                    |                            |
|--------------|--------------------|--------------------|----------------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|----------------------------|
|              | Number of licenses | Area size /ths.ha/ | Percent of total territory | Mining             |                    |                            | Exploration        |                    |                            |
|              |                    |                    |                            | Number of licenses | Area size /ths.ha/ | Percent of total territory | Number of licenses | Area size /ths.ha/ | Percent of total territory |
| <b>TOTAL</b> | <b>2,542</b>       | <b>5,973.4</b>     | <b>3.8%</b>                | <b>1711</b>        | <b>1,835.8</b>     | <b>1.2%</b>                | <b>831</b>         | <b>4,137.6</b>     | <b>2.6%</b>                |
| Arkhangai    | 30                 | 29.9               | 0.5%                       | 21                 | 11.8               | 0.2%                       | 9                  | 18.0               | 0.3%                       |
| Bayan-Ulgii  | 68                 | 220.1              | 4.8%                       | 30                 | 16.7               | 0.4%                       | 38                 | 203.4              | 4.4%                       |
| Bayankhongor | 133                | 308.7              | 2.7%                       | 100                | 167.3              | 1.4%                       | 33                 | 141.4              | 1.2%                       |
| Bulgan       | 110                | 187.9              | 3.9%                       | 82                 | 41.9               | 0.9%                       | 28                 | 145.9              | 3.0%                       |
| Govi-Altai   | 122                | 527.7              | 3.7%                       | 60                 | 105.3              | 0.7%                       | 62                 | 422.4              | 3.0%                       |
| Govisumber   | 16                 | 44.6               | 8.1%                       | 13                 | 38.9               | 7.0%                       | 3                  | 5.8                | 1.0%                       |
| Darkhan Uul  | 64                 | 13.6               | 4.2%                       | 61                 | 8.3                | 2.6%                       | 3                  | 5.3                | 1.6%                       |
| Dornogovi    | 336                | 1002.3             | 9.2%                       | 212                | 267.5              | 2.4%                       | 124                | 734.8              | 6.7%                       |
| Dornod       | 149                | 525.8              | 4.3%                       | 73                 | 68.2               | 0.6%                       | 76                 | 457.6              | 3.7%                       |
| Dundgovi     | 188                | 552.6              | 7.4%                       | 122                | 182.8              | 2.4%                       | 66                 | 369.8              | 5.0%                       |
| Zavhan       | 42                 | 156.5              | 1.9%                       | 13                 | 21.3               | 0.3%                       | 29                 | 135.2              | 1.6%                       |
| Orkhon       | 14                 | 17.6               | 21.0%                      | 9                  | 10.7               | 12.7%                      | 5                  | 6.9                | 8.2%                       |
| Uvurkhangai  | 54                 | 150.9              | 2.4%                       | 30                 | 18.1               | 0.3%                       | 24                 | 132.8              | 2.1%                       |
| Umnugovi     | 156                | 820.5              | 5.0%                       | 107                | 486.1              | 2.9%                       | 49                 | 334.4              | 2.0%                       |
| Sukhbaatar   | 86                 | 247.7              | 3.0%                       | 67                 | 56.0               | 0.7%                       | 19                 | 191.7              | 2.3%                       |
| Selenge      | 172                | 90.5               | 2.2%                       | 139                | 47.0               | 1.1%                       | 33                 | 43.5               | 1.0%                       |
| Tuv          | 381                | 351.8              | 4.8%                       | 304                | 160.7              | 2.2%                       | 77                 | 191.1              | 2.6%                       |
| Uvs          | 98                 | 248.9              | 3.6%                       | 46                 | 21.2               | 0.3%                       | 52                 | 227.7              | 3.3%                       |
| Ulaanbaatar  | 96                 | 10.0               | 2.1%                       | 92                 | 9.8                | 2.1%                       | 4                  | 0.2                | 0.05%                      |
| Khuvsgul     | 22                 | 10.6               | 0.1%                       | 21                 | 10.3               | 0.1%                       | 1                  | 0.3                | 0.003%                     |
| Khovd        | 78                 | 195.2              | 2.6%                       | 36                 | 29.5               | 0.4%                       | 42                 | 165.7              | 2.2%                       |
| Khentii      | 204                | 260.2              | 3.2%                       | 128                | 56.5               | 0.7%                       | 76                 | 203.8              | 2.5%                       |

Source: Cadastre Division, MRPAM

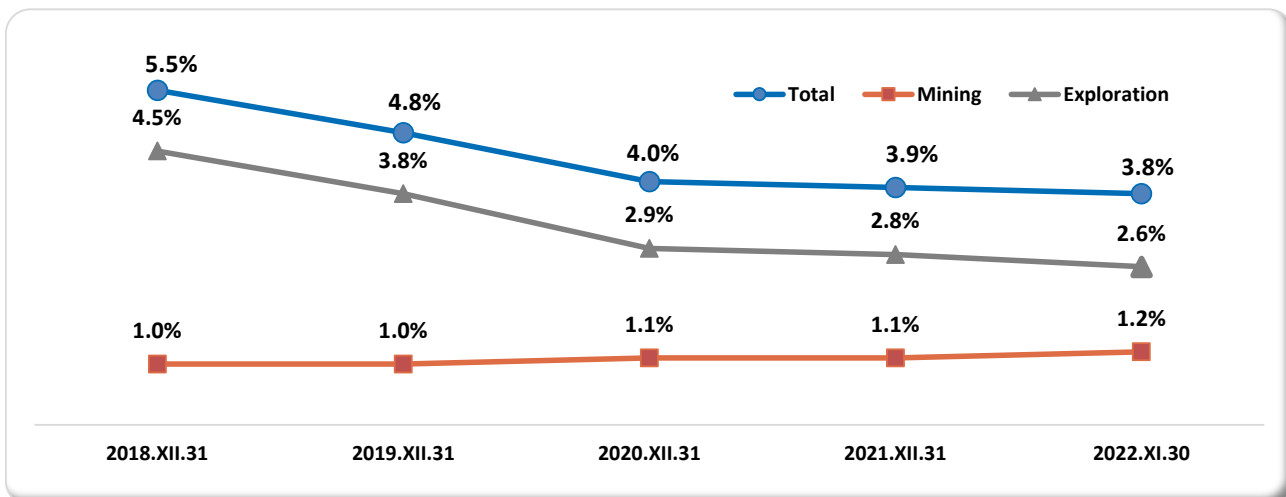
1.2. NUMBER OF TOTAL VALID LICENSES, 2018-2022



1.3. LICENSED AREA, 2018-2022, by thousands.ha



1.4. PERCENT OF TOTAL LICENSED AREA IN MONGOLIA'S TERRITORY, 2018-2022



Source: Cadastre Division, MRPAM

1.5. NUMBER OF MINING LICENSE AND AREA SIZE, 2022.XI.30, by type of minerals

|                              | Mining license |                | Area size          |                |
|------------------------------|----------------|----------------|--------------------|----------------|
|                              | Number         | Share to total | Hectare            | Share to total |
| <b>TOTAL</b>                 | <b>1711</b>    | <b>100%</b>    | <b>1,835,833.3</b> | <b>100%</b>    |
| Gold (placer)                | 462            | 27.00%         | 184,223.3          | 10.03%         |
| Coal                         | 303            | 17.71%         | 810,051.0          | 44.12%         |
| Fluorite                     | 212            | 12.39%         | 41,383.6           | 2.25%          |
| Gold ore                     | 92             | 5.38%          | 124,153.1          | 6.76%          |
| Iron                         | 80             | 4.68%          | 50,542.9           | 2.75%          |
| limestone                    | 79             | 4.62%          | 48,643.9           | 2.65%          |
| Common mineral, Clay         | 34             | 1.99%          | 2,113.6            | 0.12%          |
| Common mineral, Sand, Gravel | 34             | 1.99%          | 1,332.2            | 0.07%          |
| Common mineral, Rock         | 32             | 1.87%          | 9,090.2            | 0.50%          |
| Tungsten                     | 29             | 1.69%          | 9,062.1            | 0.49%          |
| Gypsum                       | 26             | 1.52%          | 8,761.2            | 0.48%          |
| Concentrated metal           | 23             | 1.34%          | 26,976.6           | 1.47%          |
| Copper                       | 19             | 1.11%          | 86,141.4           | 4.69%          |
| Common mineral, sand         | 18             | 1.05%          | 1,090.6            | 0.06%          |
| Tin                          | 14             | 0.82%          | 6,797.2            | 0.37%          |
| Gold (placer), Copper        | 12             | 0.70%          | 85,491.0           | 4.66%          |
| Clay                         | 11             | 0.64%          | 445.7              | 0.02%          |
| Graphite                     | 10             | 0.58%          | 20,141.9           | 1.10%          |
| Salt                         | 10             | 0.58%          | 458.0              | 0.02%          |
| Molybdenum                   | 9              | 0.53%          | 10,513.1           | 0.57%          |
| Earth rare metal             | 9              | 0.53%          | 7,435.4            | 0.41%          |
| Copper, Molybdenum           | 8              | 0.47%          | 14,328.3           | 0.78%          |
| Marble                       | 8              | 0.47%          | 7,262.8            | 0.40%          |
| Uranium                      | 6              | 0.35%          | 66,200.9           | 3.61%          |
| Manganese                    | 6              | 0.35%          | 8,500.0            | 0.46%          |
| Sand stone, Common mineral   | 6              | 0.35%          | 1,426.3            | 0.08%          |
| Slide the volcano            | 6              | 0.35%          | 886.4              | 0.05%          |
| Copper, Gold                 | 5              | 0.29%          | 8,807.4            | 0.48%          |
| Rock                         | 5              | 0.29%          | 2,781.0            | 0.15%          |
| Iron, Zinc                   | 5              | 0.29%          | 1,126.4            | 0.06%          |
| Phosphorus                   | 5              | 0.29%          | 800.0              | 0.04%          |
| Zeolite                      | 5              | 0.29%          | 705.0              | 0.04%          |

1.5.1. NUMBER OF MINING LICENSE AND AREA SIZE, 2022.XI.30, by type of minerals

(Cont. Table 1.5)

|  | Mining license |                | Area size |                |
|--|----------------|----------------|-----------|----------------|
|  | Number         | Share to total | Hectare   | Share to total |
| Construction Rock                            | 4              | 0.23%          | 19,024.8  | 1.04%          |
| Gold   | 4              | 0.23%          | 6,106.8   | 0.33%          |
| Molybdenum, Tungsten                         | 4              | 0.23%          | 4,967.3   | 0.27%          |
| Tungsten, Tin                                | 4              | 0.23%          | 2,833.9   | 0.15%          |
| Glauberite salt                              | 4              | 0.23%          | 1,449.0   | 0.08%          |
| Silver                                       | 4              | 0.23%          | 1,050.4   | 0.06%          |
| Perlit                                       | 4              | 0.23%          | 771.5     | 0.04%          |
| Precious stones                              | 4              | 0.23%          | 593.2     | 0.03%          |
| Construction materials                       | 4              | 0.23%          | 501.0     | 0.03%          |
| Sand, Gravel                                 | 3              | 0.18%          | 21,927.3  | 1.19%          |
| Gold (placer), Concentrated metal            | 3              | 0.18%          | 17,320.6  | 0.94%          |
| Gold (placer), Silver                        | 3              | 0.18%          | 9,587.7   | 0.52%          |
| Silicium                                     | 3              | 0.18%          | 2,793.1   | 0.15%          |
| Aluminium                                    | 3              | 0.18%          | 1,370.9   | 0.07%          |
| Bazalit                                      | 3              | 0.18%          | 601.5     | 0.03%          |
| Bitumen                                      | 3              | 0.18%          | 599.1     | 0.03%          |
| Common Construction, Clay, Rock              | 3              | 0.18%          | 275.3     | 0.01%          |
| Granite                                      | 2              | 0.12%          | 10,699.3  | 0.58%          |
| Gold ore, Silver                             | 2              | 0.12%          | 6,206.0   | 0.34%          |
| Gold, Copper                                 | 2              | 0.12%          | 3,158.1   | 0.17%          |
| Face stone                                   | 2              | 0.12%          | 2,618.6   | 0.14%          |
| Gold (placer), Clay, Sand                    | 2              | 0.12%          | 2,041.2   | 0.11%          |
| Zinc   | 2              | 0.12%          | 1,969.8   | 0.11%          |
| Iron, Concentrated metal                     | 2              | 0.12%          | 1,375.3   | 0.07%          |
| Quartz                                       | 2              | 0.12%          | 525.4     | 0.03%          |
| Keramzite Clay                               | 2              | 0.12%          | 207.8     | 0.01%          |
| Common mineral, Keramzite Clay               | 2              | 0.12%          | 183.5     | 0.01%          |
| Iron, limestone                              | 2              | 0.12%          | 168.5     | 0.01%          |
| Copper, Concentrated metal, Gold, Clay, Sand | 1              | 0.06%          | 8,489.9   | 0.46%          |
| Gold, Polymetal                              | 1              | 0.06%          | 7,120.6   | 0.39%          |
| Copper, Molybdenum, Gold                     | 1              | 0.06%          | 5,236.0   | 0.29%          |
| Lithium                                      | 1              | 0.06%          | 4,720.2   | 0.26%          |
| Gold ore, Concentrated metal                 | 1              | 0.06%          | 4,668.6   | 0.25%          |
| Concentrated metal, Rock                     | 1              | 0.06%          | 4,533.3   | 0.25%          |
| Copper, Nickel                               | 1              | 0.06%          | 4,523.6   | 0.25%          |
| Iron, Molybdenum                             | 1              | 0.06%          | 4,050.1   | 0.22%          |
| Gold (placer), Gold ore                      | 1              | 0.06%          | 3,404.3   | 0.19%          |
| Graphite, limestone                          | 1              | 0.06%          | 3,000.6   | 0.16%          |

1.5.2. NUMBER OF MINING LICENSE AND AREA SIZE, 2022.XI.30, by type of minerals

(Cont. Table 1.5)

|  | Mining license |                | Area size |                |
|--|----------------|----------------|-----------|----------------|
|  | Number         | Share to total | Hectare   | Share to total |
| Copper, Zinc                           | 1              | 0.06%          | 2,899.3   | 0.16%          |
| Gold, Copper, Silver                   | 1              | 0.06%          | 2,085.6   | 0.11%          |
| Molybdenum, Rhenium                    | 1              | 0.06%          | 1,789.4   | 0.10%          |
| Coal, Gold (placer)                    | 1              | 0.06%          | 1,767.2   | 0.10%          |
| Concentrated metal, Sand               | 1              | 0.06%          | 1,762.7   | 0.10%          |
| Coal, Sand, Gravel                     | 1              | 0.06%          | 1,444.1   | 0.08%          |
| Zinc, Silver, Lead                     | 1              | 0.06%          | 874.7     | 0.05%          |
| Common mineral, Construction Rock      | 1              | 0.06%          | 750.8     | 0.04%          |
| Mica                                   | 1              | 0.06%          | 596.2     | 0.03%          |
| Nickel                                 | 1              | 0.06%          | 524.6     | 0.03%          |
| limestone, Rock                        | 1              | 0.06%          | 435.2     | 0.02%          |
| Bargilt                                | 1              | 0.06%          | 335.0     | 0.02%          |
| Fluorite, Tungsten                     | 1              | 0.06%          | 302.5     | 0.02%          |
| Bazalit, Common mineral                | 1              | 0.06%          | 277.5     | 0.02%          |
| Gold (placer), Iron                    | 1              | 0.06%          | 251.4     | 0.01%          |
| Color metal                            | 1              | 0.06%          | 227.5     | 0.01%          |
| Silver, Concentrated metal             | 1              | 0.06%          | 182.8     | 0.01%          |
| Beryllium                              | 1              | 0.06%          | 132.1     | 0.01%          |
| Agalmatolite, Baryte                   | 1              | 0.06%          | 125.7     | 0.007%         |
| Garnet                                 | 1              | 0.06%          | 86.3      | 0.005%         |
| Gold, Clay, Sand                       | 1              | 0.06%          | 79.4      | 0.004%         |
| Sand                                   | 1              | 0.06%          | 66.7      | 0.004%         |
| Zeolite, Common mineral                | 1              | 0.06%          | 64.8      | 0.004%         |
| Red jasper                             | 1              | 0.06%          | 49.3      | 0.003%         |
| Green jasper                           | 1              | 0.06%          | 47.5      | 0.003%         |
| Common mineral, Sand, Gravel, Rock     | 1              | 0.06%          | 39.3      | 0.002%         |
| Common mineral, Sand, Rock             | 1              | 0.06%          | 38.6      | 0.002%         |
| Sand, Common mineral                   | 1              | 0.06%          | 37.1      | 0.002%         |
| Gold (placer), Coal                    | 1              | 0.06%          | 35.9      | 0.002%         |
| Common mineral, Sand, Gravel, Rock     | 1              | 0.06%          | 32.1      | 0.002%         |
| Fluorite, limestone                    | 1              | 0.06%          | 26.6      | 0.001%         |
| Magnesite                              | 1              | 0.06%          | 26.5      | 0.001%         |
| Coal, Clay                             | 1              | 0.06%          | 26.4      | 0.001%         |
| Copper, Common Mineral, Gravel         | 1              | 0.06%          | 26.0      | 0.001%         |
| Common mineral                         | 1              | 0.06%          | 21.3      | 0.001%         |
| Construction materials, Common mineral | 1              | 0.06%          | 18.6      | 0.001%         |

Source: Cadastre Division, MRPAM

1.6. REGISTERED AREA, давхардсан байдлаар, 2022.XI.30, by mln.ha, overlap

|   | Hectare | Share of total territory |
|---|---------|--------------------------|
| Valid mining licensed area                  | 1.8     | 1.2%                     |
| Valid exploration licensed area             | 4.1     | 2.6%                     |
| State protected area                        | 33.9    | 21.7%                    |
| Special purpose area                        | 34.2    | 21.9%                    |
| Strategic deposit, government reserved area | 7.2     | 4.6%                     |
| Settled area, border and railway strip area | 1.1     | 0.7%                     |
| Other prohibited area                       | 49.1    | 31.4%                    |

1.7. SMALL-SCALE MINING AREA, 2022.XI.30, by provinces

|              | Area       |                | Area size     |                |
|--------------|------------|----------------|---------------|----------------|
|              | Number     | Share to total | Hectare       | Share to total |
| <b>TOTAL</b> | <b>262</b> | <b>100%</b>    | <b>1063.7</b> | <b>100%</b>    |
| Arkhangai    | 1          | 0.4%           | 4.75          | 0.4%           |
| Bayan-Ulgii  | 2          | 0.8%           | 53.74         | 5.1%           |
| Bayankhongor | 57         | 21.8%          | 152.25        | 14.3%          |
| Bulgan       | 29         | 11.1%          | 126.36        | 11.9%          |
| Govi-Altai   | 1          | 0.4%           | 5.71          | 0.5%           |
| Darkhan Uul  | 6          | 2.3%           | 16.56         | 1.6%           |
| Dornogovi    | 2          | 0.8%           | 9.57          | 0.9%           |
| Dornod       | 2          | 0.8%           | 26.25         | 2.5%           |
| Dundgovi     | 13         | 5.0%           | 104.52        | 9.8%           |
| Uvurkhangai  | 20         | 7.6%           | 39.71         | 3.7%           |
| Umnugovi     | 20         | 7.6%           | 86.29         | 8.1%           |
| Selenge      | 52         | 19.8%          | 220.05        | 20.7%          |
| Tuv          | 12         | 4.6%           | 78.31         | 7.4%           |
| Ulaanbaatar  | 5          | 1.9%           | 18.96         | 1.8%           |
| Khovd        | 4          | 1.5%           | 11.25         | 1.1%           |
| Khentii      | 36         | 13.7%          | 109.42        | 10.3%          |

Source: Cadastre Division, MRPAM

## 1.8. ORIGIN OF LICENSE HOLDERS, 2022.XI.30

|                        | Holder      | License     | Area size          |                |
|------------------------|-------------|-------------|--------------------|----------------|
|                        | Number      | Number      | Hectare            | Share to total |
| <b>БҮГД</b>            | <b>1639</b> | <b>2542</b> | <b>5,973,443.2</b> | <b>100%</b>    |
| Mongolian entities     | 1309        | 2017        | 4,452,678.5        | 74.5%          |
| 100% foreign entities  | 238         | 374         | 1,223,231.5        | 20.5%          |
| Joint foreign entities | 92          | 151         | 297,533.2          | 5.0%           |

## 1.9. ORIGIN OF 100% FOREIGN LICENSE HOLDERS, 2022.XI.30, by countries

|                           | Holder     | License    | Area size          |                |
|---------------------------|------------|------------|--------------------|----------------|
|                           | Number     | Number     | Hectare            | Share to total |
| <b>TOTAL</b>              | <b>238</b> | <b>374</b> | <b>1,223,231.5</b> | <b>100%</b>    |
| China                     | 130        | 160        | 362,737.9          | 29.65%         |
| Virgin Islands            | 24         | 44         | 80,468.3           | 6.58%          |
| Hong Kong                 | 14         | 29         | 85,448.7           | 6.99%          |
| Canada                    | 14         | 24         | 255,180.8          | 20.86%         |
| Singapore                 | 13         | 52         | 317,418.3          | 25.95%         |
| South Korea               | 11         | 13         | 17,780.0           | 1.45%          |
| Russia                    | 4          | 5          | 2,490.4            | 0.20%          |
| Australia                 | 4          | 4          | 29,059.9           | 2.38%          |
| Great Britain             | 3          | 4          | 6,038.7            | 0.49%          |
| Switzerland               | 2          | 3          | 19,929.2           | 1.63%          |
| Luxemburg                 | 2          | 6          | 13,528.2           | 1.11%          |
| Holland                   | 2          | 10         | 6,620.2            | 0.54%          |
| Japan                     | 2          | 3          | 3,015.1            | 0.25%          |
| United States of America  | 2          | 4          | 2,442.3            | 0.20%          |
| Germany                   | 2          | 2          | 603.9              | 0.05%          |
| Bulgaria                  | 1          | 1          | 3,700.9            | 0.30%          |
| Russia, China             | 1          | 1          | 47.5               | 0.00%          |
| Thailand                  | 1          | 1          | 3,027.9            | 0.248%         |
| Seychelles                | 1          | 1          | 375.2              | 0.031%         |
| Virgin Islands, Singapore | 1          | 1          | 1,934.0            | 0.158%         |
| Malaysia                  | 1          | 2          | 2,416.5            | 0.20%          |
| Russia, South Korea       | 1          | 1          | 118.2              | 0.01%          |
| Australia, China          | 1          | 2          | 8,795.4            | 0.719%         |
| Great Britain, China      | 1          | 1          | 54.2               | 0.004%         |

Source: Cadastre Division, MRPAM



1.10. ORIGIN OF JOINT FOREIGN LICENSE HOLDERS, 2022.X.31, by countries

|                                | Holder    | License    | Area size        |                |
|--------------------------------|-----------|------------|------------------|----------------|
|                                | Number    | Number     | Hectare          | Share to total |
| <b>TOTAL</b>                   | <b>92</b> | <b>151</b> | <b>297,533.2</b> | <b>100%</b>    |
| Mongolia, China                | 37        | 50         | 30,591.4         | 10.3%          |
| Mongolia, Singapore            | 11        | 26         | 48,714.8         | 16.4%          |
| Mongolia, South Korea          | 10        | 14         | 27,073.3         | 9.1%           |
| Mongolia, Russia               | 8         | 12         | 3,929.1          | 1.3%           |
| Mongolia, Virgin Islands       | 5         | 7          | 24,787.6         | 8.3%           |
| Mongolia, Japan                | 5         | 13         | 47,640.0         | 16.0%          |
| Mongolia, Hong Kong            | 2         | 7          | 23,454.2         | 7.9%           |
| Mongolia, Germany              | 2         | 3          | 5,748.1          | 1.9%           |
| Mongolia, Czech Republic       | 2         | 4          | 17,911.4         | 6.0%           |
| Mongolia, Kazakhstan           | 1         | 1          | 1,789.4          | 0.6%           |
| Mongolia, Bulgaria             | 1         | 3          | 1,083.7          | 0.4%           |
| Mongolia, Great Britain        | 1         | 1          | 1,472.0          | 0.5%           |
| Mongolia, Canada, China        | 1         | 1          | 6,352.8          | 2.1%           |
| Mongolia, Luxemburg            | 1         | 2          | 10,011.2         | 3.4%           |
| Mongolia, Russia, Ukraine      | 1         | 1          | 46.9             | 0.0%           |
| Mongolia, Poland               | 1         | 1          | 1,561.3          | 0.5%           |
| Mongolia, Singapore, Hong Kong | 1         | 1          | 1,469.5          | 0.49%          |
| Mongolia, Hong Kong, Japan     | 1         | 3          | 43,809.3         | 14.7%          |
| Mongolia, Hungary              | 1         | 1          | 87.4             | 0.0%           |

Source: Cadastre Division, MRPAM

1.11. PLEDGING LICENSES, 2022.XI.30, by bank and non-bank financial institute

|  | License    |                | Area             |                |
|--|------------|----------------|------------------|----------------|
|  | Number     | Share to total | Hectare          | Share to total |
| <b>TOTAL</b>                                     | <b>234</b> | <b>100%</b>    | <b>222,179.7</b> | <b>100%</b>    |
| Trade and Development Bank                       | 45         | 19.1%          | 30,350.1         | 13.7%          |
| Development Bank of Mongolia                     | 25         | 13.2%          | 18,914.8         | 8.5%           |
| Golomt Bank                                      | 31         | 10.6%          | 23,644.3         | 10.6%          |
| HAAN Bank  | 19         | 8.1%           | 5,506.3          | 2.5%           |
| ABTS NBFi  | 17         | 7.2%           | 28,681.7         | 12.9%          |
| Transport Development bank                       | 10         | 4.3%           | 7,238.0          | 3.3%           |
| Capital Bank                                     | 9          | 3.8%           | 1,098.2          | 0.5%           |
| XAC Bank   | 8          | 3.4%           | 2,463.6          | 1.1%           |
| European Bank for Reconstruction and Development | 7          | 3.0%           | 2,658.5          | 1.2%           |
| Chinggis Khan Bank                               | 6          | 3.0%           | 2,509.5          | 1.1%           |
| Anod Bank  | 6          | 2.6%           | 6,971.8          | 3.1%           |
| Golomt, Saving, Zoos, Anod Banks                 | 6          | 2.6%           | 3,277.7          | 1.5%           |
| Capitron bank                                    | 6          | 2.6%           | 6,471.1          | 2.9%           |
| Khutult nomgon NBFi                              | 3          | 1.3%           | 279.1            | 0.1%           |
| GSB capital NBFi                                 | 3          | 1.3%           | 9,884.4          | 4.4%           |
| Bank of China                                    | 3          | 1.3%           | 871.6            | 0.4%           |
| State Bank                                       | 2          | 0.9%           | 271.7            | 0.1%           |
| Great Capital NBFi                               | 2          | 0.9%           | 1,180.5          | 0.5%           |
| National Investment Bank                         | 2          | 0.9%           | 805.0            | 0.4%           |
| Ulaanbaatar City bank                            | 2          | 0.9%           | 789.7            | 0.4%           |
| First lithium Corporation NBFi                   | 2          | 0.9%           | 17,131.1         | 7.7%           |
| Bilegnasan NBFi                                  | 2          | 0.9%           | 32,711.7         | 14.7%          |
| Erel bank  | 2          | 0.9%           | 150.3            | 0.1%           |
| Ecocapital NBFi                                  | 1          | 0.4%           | 583.4            | 0.3%           |
| Jet finance NBFi                                 | 1          | 0.4%           | 56.8             | 0.0%           |
| Saving bank                                      | 1          | 0.4%           | 1,773.7          | 0.8%           |
| Export-Import Bank of China                      | 1          | 0.4%           | 275.0            | 0.1%           |
| RUS Finance NBFi                                 | 1          | 0.4%           | 148.9            | 0.1%           |
| Mongol Post bank                                 | 1          | 0.4%           | 86.6             | 0.0%           |
| Khas Khaan NBFi                                  | 1          | 0.4%           | 227.5            | 0.1%           |
| Standard Chartered Bank                          | 1          | 0.4%           | 8,489.9          | 3.8%           |
| Business-Invest Development NBFi                 | 1          | 0.4%           | 1,791.4          | 0.8%           |
| Credit Express NBFi                              | 1          | 0.4%           | 235.6            | 0.1%           |
| Munkh OrshiKh Capital NBFi                       | 1          | 0.4%           | 178.1            | 0.1%           |
| Kherlen Onon Tuul NBFi                           | 1          | 0.4%           | 1,767.2          | 0.8%           |
| Achit Capital NBFi                               | 1          | 0.4%           | 9.0              | 0.0%           |
| Gasprom bank                                     | 1          | 0.4%           | 368.3            | 0.2%           |
| Turquoise Finance NBFi                           | 1          | 0.4%           | 673.4            | 0.3%           |
| Bayasakh Sonor NBFi                              | 1          | 0.4%           | 1,654.2          | 0.7%           |

Source: Cadastre Division, MRPAM

## 1.12. LIST OF LICENSE HOLDERS WITH 10 AND ABOVE LICENSES, 2022.XI.30

| No | Name of entity             | Number of license | Area size /ha/ | Company type                        | Nationality         |
|----|----------------------------|-------------------|----------------|-------------------------------------|---------------------|
| 1  | Mongolrosvetmet            | 26                | 15,743.8       | mongolian legal entity              | Mongolia            |
| 2  | Mongolyn alt Mak           | 24                | 57,090.7       | mongolian legal entity              | Mongolia            |
| 3  | Tsaina investment mongolia | 15                | 207,645.0      | Entity with 100% foreign investment | Singapore           |
| 4  | Gatsuurt                   | 15                | 8,488.1        | mongolian legal entity              | Mongolia            |
| 5  | Erdenet                    | 13                | 126,947.7      | mongolian legal entity              | Mongolia            |
| 6  | Burdel mining              | 13                | 2,344.4        | mongolian legal entity              | Mongolia            |
| 7  | Aurum metals               | 12                | 51,968.0       | mongolian legal entity              | Mongolia            |
| 8  | Saker Resource Mongolia    | 12                | 7,139.8        | Joint foreign entities              | Mongolia, Singapore |
| 9  | Khunnu gobi altai          | 12                | 2,206.7        | mongolian legal entity              | Mongolia            |
| 10 | Platinum land              | 11                | 3,621.3        | mongolian legal entity              | Mongolia            |
| 11 | MB Investo                 | 10                | 29,686.2       | mongolian legal entity              | Mongolia            |
| 12 | MoEnCo                     | 10                | 12,807.4       | Entity with 100% foreign investment | Singapore           |
| 13 | MAK cement                 | 10                | 3,745.9        | mongolian legal entity              | Mongolia            |

## 1.13. LIST OF LICENSE HOLDERS WITH 100'000 AND ABOVE LICENSED AREA SIZE, 2022.XI.30

| No | Name of entity             | Number of license | Area size /ha/ | Company type                 | Nationality |
|----|----------------------------|-------------------|----------------|------------------------------|-------------|
| 1  | Tsaina investment mongolia | 15                | 207,645.0      | 100% foreign invested entity | Singapore   |
|    | Erdenet                    | 13                | 126,947.7      | mongolian legal entity       | Mongolia    |
| 2  | Ion energy                 | 2                 | 111,529.2      | 100% foreign invested entity | Canada      |

Source: Cadastre Division, MRPAM

## 1.14. RECEIVED APPLICATION, 2018-2022, by application type

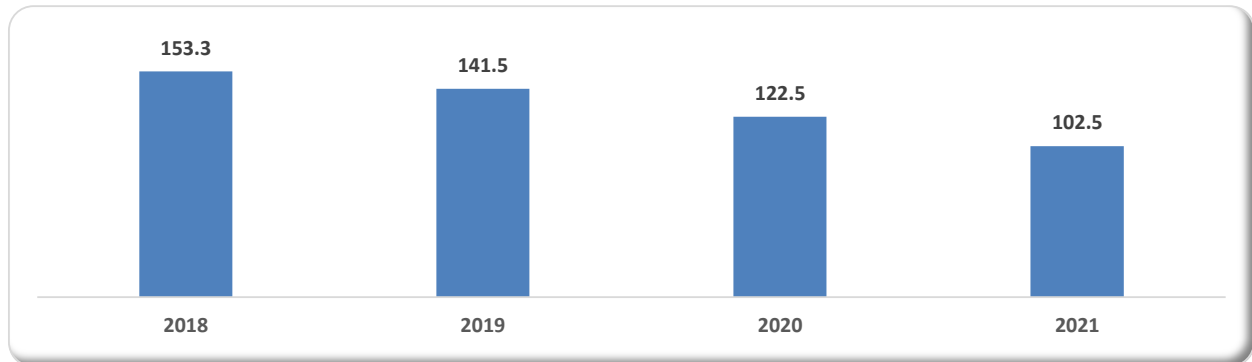
|                    | 2018        | 2019       | 2020       | 2021       | 2022.I-XI  |
|--------------------|-------------|------------|------------|------------|------------|
| <b>TOTAL</b>       | <b>1187</b> | <b>698</b> | <b>502</b> | <b>943</b> | <b>473</b> |
| <b>New license</b> | <b>226</b>  | <b>218</b> | <b>253</b> | <b>463</b> | <b>140</b> |
| Mining             | 78          | 73         | 87         | 47         | 28         |
| Exploration        | 0           | 0          | 0          | 0          | 0          |
| Tender             | 148         | 145        | 166        | 416        | 112        |
| <b>Extension</b>   | <b>657</b>  | <b>273</b> | <b>75</b>  | <b>337</b> | <b>220</b> |
| Mining             | 0           | 0          | 0          | 1          | 1          |
| Exploration        | 657         | 273        | 75         | 336        | 219        |
| <b>Transfer</b>    | <b>157</b>  | <b>72</b>  | <b>80</b>  | <b>76</b>  | <b>62</b>  |
| Mining             | 25          | 24         | 32         | 19         | 14         |
| Exploration        | 132         | 48         | 48         | 57         | 48         |
| <b>Pledge</b>      | <b>61</b>   | <b>25</b>  | <b>28</b>  | <b>38</b>  | <b>20</b>  |
| Mining             | 58          | 24         | 28         | 34         | 18         |
| Exploration        | 3           | 1          | 0          | 4          | 2          |
| <b>Surrender</b>   | <b>86</b>   | <b>110</b> | <b>66</b>  | <b>29</b>  | <b>31</b>  |
| Mining             | 12          | 12         | 16         | 6          | 11         |
| Exploration        | 74          | 98         | 50         | 23         | 20         |

## 1.15. CHANGES IN LICENSE REGISTRATION, 2018-2022, by license type

|                                      | 2018       | 2019       | 2020       | 2021       | 2022.I-XI  |
|--------------------------------------|------------|------------|------------|------------|------------|
| <b>New license</b>                   | <b>85</b>  | <b>130</b> | <b>90</b>  | <b>163</b> | <b>92</b>  |
| Mining                               | 61         | 59         | 55         | 54         | 35         |
| Exploration                          | 5          | 0          | 8          | 0          | 7          |
| Tender                               | 19         | 71         | 27         | 109        | 50         |
| <b>Surrendered</b>                   | <b>91</b>  | <b>93</b>  | <b>71</b>  | <b>26</b>  | <b>29</b>  |
| Mining                               | 11         | 11         | 16         | 4          | 10         |
| Exploration                          | 80         | 82         | 55         | 22         | 19         |
| <b>Canceled</b>                      | <b>181</b> | <b>189</b> | <b>140</b> | <b>75</b>  | <b>45</b>  |
| Mining                               | 33         | 70         | 52         | 30         | 20         |
| Exploration                          | 148        | 119        | 88         | 45         | 25         |
| <b>Expired</b>                       | <b>209</b> | <b>199</b> | <b>133</b> | <b>120</b> | <b>96</b>  |
| <b>Transferred</b>                   | <b>172</b> | <b>71</b>  | <b>83</b>  | <b>74</b>  | <b>63</b>  |
| Mining                               | 38         | 24         | 35         | 16         | 16         |
| Exploration                          | 134        | 47         | 48         | 58         | 47         |
| <b>Extended</b>                      | <b>566</b> | <b>300</b> | <b>68</b>  | <b>246</b> | <b>291</b> |
| <b>Pledged</b>                       | <b>56</b>  | <b>23</b>  | <b>27</b>  | <b>38</b>  | <b>19</b>  |
| Mining                               | 53         | 23         | 27         | 34         | 17         |
| Exploration                          | 3          | 0          | 0          | 4          | 2          |
| <b>Terminated pledges</b>            | <b>27</b>  | <b>31</b>  | <b>28</b>  | <b>16</b>  | <b>23</b>  |
| Mining                               | 26         | 30         | 28         | 16         | 22         |
| Exploration                          | 1          | 1          | 0          | 0          | 1          |
| <b>Re-issue of license documents</b> | <b>40</b>  | <b>27</b>  | <b>17</b>  | <b>11</b>  | <b>6</b>   |
| Mining                               | 13         | 14         | 11         | 5          | 4          |
| Exploration                          | 27         | 13         | 6          | 6          | 2          |

Source: Cadastre Division, MRPAM

## 2.1. GEOLOGICAL AND EXPLORATION SURVEY CONDUCTED AT EXPENSES OF THE EXPLORATION LICENSE, 2018-2021 (2022.X.01)



## 2.2. GEOLOGICAL AND EXPLORATION SURVEY CONDUCTED AT EXPENSES OF THE EXPLORATION LICENSE, 2020-2021 (2022.X.01), by million MNT and type work

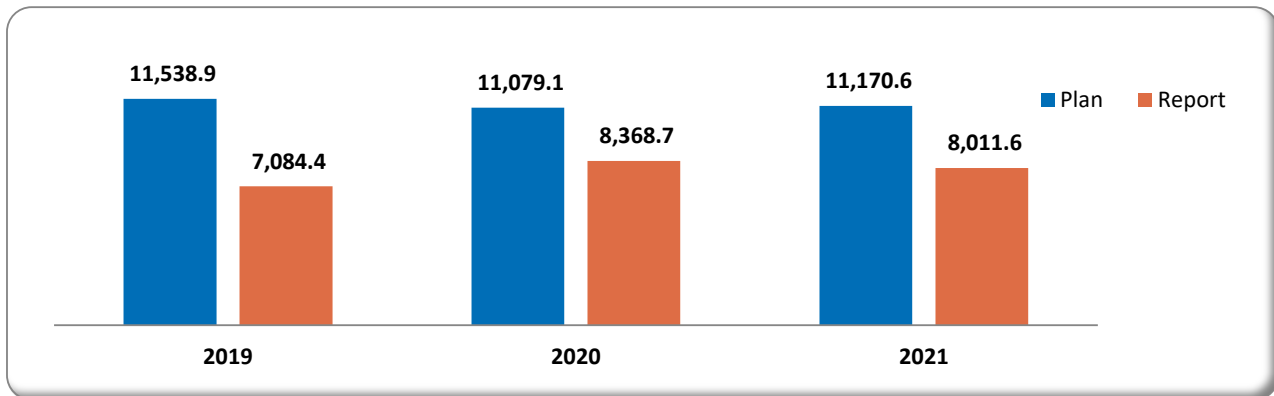
|                                  | 2020             |                | 2021             |                |
|----------------------------------|------------------|----------------|------------------|----------------|
|                                  | Total amount     | Share to total | Total amount     | Share to total |
| <b>TOTAL</b>                     | <b>122,517.4</b> | <b>100%</b>    | <b>102,519.5</b> | <b>100%</b>    |
| Preparation                      | 2,622.5          | 2.1%           | 2,827.9          | 2.8%           |
| Mapping                          | 2,003.8          | 1.6%           | 1,581.6          | 1.5%           |
| Geological survey                | 1,590.3          | 1.3%           | 1,325.4          | 1.3%           |
| Sampling                         | 875.8            | 0.7%           | 1,069.3          | 1.0%           |
| Geophysical work                 | 6,660.0          | 5.4%           | 3,625.7          | 3.5%           |
| Mining                           | 10,403.5         | 8.5%           | 1,219.2          | 1.2%           |
| Drilling                         | 64,405.0         | 52.6%          | 63,058.3         | 61.5%          |
| Indoor, laboratory investigation | 7,068.6          | 5.8%           | 3,247.7          | 3.2%           |
| Laboratory                       | 11,068.0         | 9.0%           | 6,811.3          | 6.6%           |
| Transport                        | 2,300.0          | 1.9%           | 3,017.3          | 2.9%           |
| Topogeodetic work                | 3,491.7          | 2.8%           | 885.6            | 0.9%           |
| Hydrogeological work             | 1,048.0          | 0.9%           | 992.0            | 1.0%           |
| Geoecological survey             | 1,081.7          | 0.9%           | 69.7             | 0.1%           |
| Archeology                       | 570.7            | 0.5%           | 354.5            | 0.3%           |
| Environment reclamation          | 380.5            | 0.3%           | 517.3            | 0.5%           |
| Field sampling                   | 319.5            | 0.3%           | 5,130.4          | 5.0%           |
| Assume expenses                  | 6,231.9          | 5.1%           | 544.4            | 0.5%           |
| Other                            | 396.0            | 0.3%           | 6,241.9          | 6.1%           |

Source: Geology and Exploration Division, MRPAM

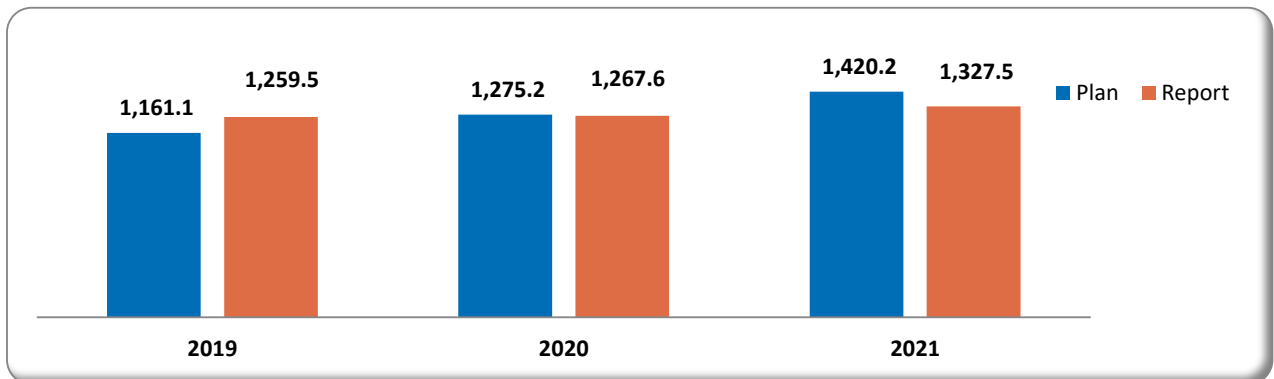
### 3.1. MINERAL MINING ACTIVITY PLAN AND REPORT OFFICIAL STATUS, 2018-2022, (2022.XII.06)

|      | Plan      |        |          | Report    |        |          |
|------|-----------|--------|----------|-----------|--------|----------|
|      | Submitted | Formal | Formal % | Submitted | Formal | Formal % |
| 2018 | 488       | 388    | 79.5%    | 278       | 261    | 93.9%    |
| 2019 | 515       | 420    | 81.6%    | 288       | 261    | 90.6%    |
| 2020 | 491       | 363    | 73.9%    | 252       | 216    | 85.7%    |
| 2021 | 523       | 410    | 78.4%    | 277       | 221    | 79.8%    |
| 2022 | 505       | 445    | 88.1%    | -         | -      | -        |

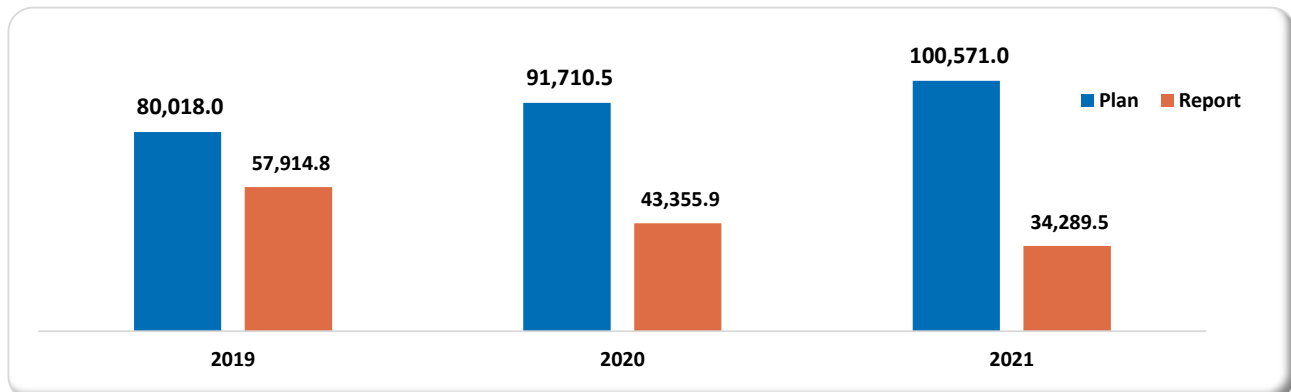
### 3.2. GOLD PRODUCTION, 2019-2021, (2022.XII.06), by kg, mined from hard rock and placer deposits



### 3.3. COPPER CONCENTRATE PRODUCTION, 2019-2021, (2022.XII.06), by ths.tons



### 3.4. COAL PRODUCTION, 2019-2021, (2022.XII.06), by ths tons



Source: Mining Division, MRPAM

## 3.5. MINERAL PRODUCTION, 2021-2022 (2022.XII.06), by mineral type

|  | Unit of measurement | 2020*    |          | 2021*     |          |
|--|---------------------|----------|----------|-----------|----------|
|  |                     | Plan     | Report   | Plan      | Report   |
| Gold (Total)   | kg                  | 15,888.9 | 14,511.1 | 46,146.6  | 22,824.3 |
| Gold (Amount of gold that accompanies the concentrate)                     | kg                  | 4,809.8  | 6,142.3  | 34,975.9  | 14,812.8 |
| Gold (Total amount of gold to be mined from hard rock and placer deposits) | kg                  | 11,079.1 | 8,368.7  | 11,170.6  | 8,011.6  |
| Gold (Amount of gold to be extracted from the hard rock)                   | kg                  | 4,698.1  | 3,036.0  | 4,793.5   | 3,166.6  |
| Gold (Amount of gold to be mined from placer deposits)                     | kg                  | 6,381.0  | 5,332.7  | 6,377.1   | 4,845.0  |
| Building materials   |                     |          |          |           |          |
| Lime   | ths.tons            | 245.6    | 48.1     | 125.7     | 2.6      |
| Limestone  | ths.tons            | 1,187.7  | 310.2    | 1,360.7   | 504.5    |
| Clinker  | ths.tons            | 814.0    | -        | 26.6      | -        |
| Cement   | ths.tons            | 869.2    | 1,557.0  | 1,950.0   | 1,117.2  |
| Mineral powder   | ths.tons            | -        | -        | 31.0      | -        |
| Crystal  | ths.tons            | 61.8     | -        | 6.1       | -        |
| Marble   | ths.tons            | 252.9    | 2.6      | 256.8     | -        |
| Gypsum   | ths.tons            | 166.6    | 97.9     | 173.5     | 111.4    |
| Tungsten   | tons                | 621.7    | 12.5     | 1,628.9   | -        |
| Copper concentrate   | ths.tons            | 1,275.2  | 1,267.6  | 1,420.2   | 1,327.5  |
| Copper (Cathode)   | tons                | 10.0     | 7.6      | 7.8       | 7.8      |
| Manganese  | ths.tons            | 129.1    | -        | 208.7     | -        |
| Molybdenum concentrate   | ths.tons            | 4.7      | 6.0      | 5.0       | 6.3      |
| Silver   | -                   | -        | -        | -         | -        |
| Silver bullion (oblong)  | kg                  | 12,761.9 | 2,946.0  | 9,890.7   | 2,471.6  |
| Silver concentrate   | ths.tons            | 194.6    | 201.5    | 7.8       | 3.3      |
| Silver ore   | ths.tons            | -        | -        | -         | 127.3    |
| Amount of silver accompanying the concentrate                              | kg                  | 65,000.1 | 27,478.3 | 73,329.3  | 76,563.4 |
| Iron   | ths.tons            | 15,220.5 | 10,090.0 | 15,166.9  | 8,418.1  |
| Whole iron concentrate   | ths.tons            | 5,087.5  | 3,077.0  | 5,162.5   | 4,250.7  |
| Iron powder concentrate  | ths.tons            | 6,769.2  | 2,444.6  | 7,308.4   | 2,925.1  |
| Iron ore   | ths.tons            | 3,260.9  | 2,900.5  | 1,002.0   | 1,781.9  |
| Powdered iron ore  | ths.tons            | 103.0    | 1,668.0  | 1,694.0   | 704.8    |
| Uranium Yellow powder  | tons                | 31.4     | 3.9      | 29.8      | 11.2     |
| Amount of uranium in yellow powder   | tons                | 16,450.0 | 1.3      | 11.1      | 4.2      |
| Fluorite   | ths.tons            | 2,207.4  | 496.1    | 2,200.7   | 458.3    |
| Fluorite concentrate AG-97   | ths.tons            | 129.0    | 14.9     | 211.5     | 38.1     |
| Fluorite concentrate AG-95   | ths.tons            | 120.9    | 51.8     | 91.4      | 31.1     |
| Gravitational fluorite МГФ 55-85   | ths.tons            | -        | -        | -         | 8.6      |
| Whole fluorite MG-92   | ths.tons            | 28.2     | 4.8      | 46.7      | 6.0      |
| Whole fluorite MG-85   | ths.tons            | 30.0     | 1.6      | 81.9      | 0.1      |
| Whole fluorite MG-80   | ths.tons            | 12.7     | 1.8      | 5.3       | 0.2      |
| Whole fluorite MG-75   | ths.tons            | 199.9    | 42.7     | 222.9     | 29.8     |
| Whole fluorite MG-65   | ths.tons            | 6.2      | 32.7     | 9.5       | 33.9     |
| Fluorite ore ФП  | ths.tons            | 1,680.4  | 345.8    | 1,531.7   | 310.5    |
| Blue lead  | ths.tons            | 16.4     | 26.0     | 17.2      | 20.7     |
| Polishing stone  | ths.tons            | -        | -        | 26.8      | 75.6     |
| Tin  | tons                | -        | -        | 78.2      | -        |
| Zinc   | ths.tons            | 129.6    | 127.9    | 112.9     | 112.4    |
| Zeolite  | ths.tons            | 105.2    | -        | -         | -        |
| Coal production  | ths.tons            | 91,710.5 | 43,355.9 | 100,571.0 | 34,289.5 |

\*-Based on data from the 2021 Mining Report for Minerals Other than Common Minerals.

Source: Mining Division, MRPAM

## 3.6. REHABILITATION WORK BY MINING LICENSE HOLDERS, 2017-2021 (2022.XI.09)\*

|   | Unit    | 2018     | 2019     | 2020    | 2021*   |
|---|---------|----------|----------|---------|---------|
| Area covered by mining  | ha      | 7,837.9  | 7,078.9  | 8,434.6 | 524.6   |
| Area covered by technical rehabilitation                      | ha      | 1,767.3  | 1,927.6  | 2,069.6 | 380.8   |
| Of which: External stockpile                                  | ha      | 1,018.4  | 1,198.2  | 1,548.0 | 107.6   |
| Internal stockpile  | ha      | 748.9    | 729.8    | 521.7   | 273.3   |
| Area covered by biological rehabilitation                     | ha      | 790.5    | 704.8    | 623.6   | 229.4   |
| Area of abusive protection rehabilitation                     | ha      | 17,459.3 | 19,144.3 | 236.6   | 6,894.5 |
| Area of remodeling the mine and rehabilitation of the village | ha      | 62.3     | 57.1     | 50.5    | 17.89   |
| Expenses for rehabilitation                                   | bln.MNT | 22.2     | 28.7     | 21.3    | 26.1    |
| Environmental expenses  | bln.MNT | 10.8     | 15.8     | 16.8    | 7.4     |

## 3.7. AREA COVERED BY MINING AND REHABILITATION AREA IN 2021, (2022.XI.09)\* by provinces

|              | Number of entities | Area covered by mining |                | Area covered by technical rehabilitation |                | Area covered by biological rehabilitation |                |
|--------------|--------------------|------------------------|----------------|--|----------------|---|----------------|
|              |                    | Hectare                | Share to total | Hectare                                  | Share to total | Hectare                                   | Share to total |
| <b>TOTAL</b> | <b>196</b>         | <b>1,134.7</b>         | <b>100%</b>    | <b>728.7</b>                             | <b>100%</b>    | <b>429.3</b>                              | <b>100%</b>    |
| Arkhangai    | 1                  | 6.6                    | 0.6%           | 5.6                                      | 0.8%           | 26.0                                      | 6.1%           |
| Bayan-Ulgii  | 1                  | 1.3                    | 0.1%           | 0.0                                      | 0.0%           | 0.0                                       | 0.0%           |
| Bayankhongor | 10                 | 26.2                   | 2.3%           | 32.4                                     | 4.4%           | 1.6                                       | 0.4%           |
| Bulgan       | 11                 | 109.0                  | 9.6%           | 47.2                                     | 6.5%           | 86.3                                      | 20.1%          |
| Govi-Altai   | 5                  | 10.1                   | 0.9%           | 0.0                                      | 0.0%           | 0.0                                       | 0.0%           |
| Gobisumber   | 2                  | 6.3                    | 0.6%           | 5.4                                      | 0.7%           | 7.6                                       | 1.8%           |
| Darkhan Uul  | 10                 | 13.1                   | 1.2%           | 69.2                                     | 9.5%           | 16.9                                      | 3.9%           |
| Dornogovi    | 20                 | 124.2                  | 10.9%          | 31.4                                     | 4.3%           | 5.2                                       | 1.2%           |
| Dornod       | 10                 | 26.9                   | 2.4%           | 36.0                                     | 4.9%           | 24.3                                      | 5.7%           |
| Dundgovi     | 16                 | 33.8                   | 3.0%           | 14.0                                     | 1.9%           | 2.2                                       | 0.5%           |
| Zavkhan      | 2                  | 13.7                   | 1.2%           | 13.3                                     | 1.8%           | 10.3                                      | 2.4%           |
| Orkhon       | 2                  | 22.3                   | 2.0%           | 0.0                                      | 0.0%           | 5.5                                       | 1.3%           |
| Uvurkhangai  | 5                  | 15.0                   | 1.3%           | 22.8                                     | 3.1%           | 15.2                                      | 3.5%           |
| Umnugovi     | 16                 | 147.8                  | 13.0%          | 36.1                                     | 5.0%           | 25.2                                      | 5.9%           |
| Sukhbaatar   | 13                 | 18.5                   | 1.6%           | 47.1                                     | 6.5%           | 3.0                                       | 0.7%           |
| Selenge      | 11                 | 156.3                  | 13.8%          | 53.4                                     | 7.3%           | 26.4                                      | 6.1%           |
| Tuv          | 38                 | 298.9                  | 26.3%          | 304.5                                    | 41.8%          | 168.1                                     | 39.2%          |
| Uvs          | 4                  | 3.8                    | 0.3%           | 1.3                                      | 0.2%           | 0.6                                       | 0.1%           |
| Ulaanbaatar  | 1                  | 0.0                    | 0.0%           | 0.0                                      | 0.0%           | 0.5                                       | 0.1%           |
| Khovd        | 3                  | 82.3                   | 7.3%           | 0.0                                      | 0.0%           | 1.1                                       | 0.3%           |
| Khentii      | 15                 | 18.6                   | 1.6%           | 9.1                                      | 1.2%           | 3.3                                       | 0.8%           |

Based on data from the 2021 Mining Report for Minerals Other than Common Minerals.

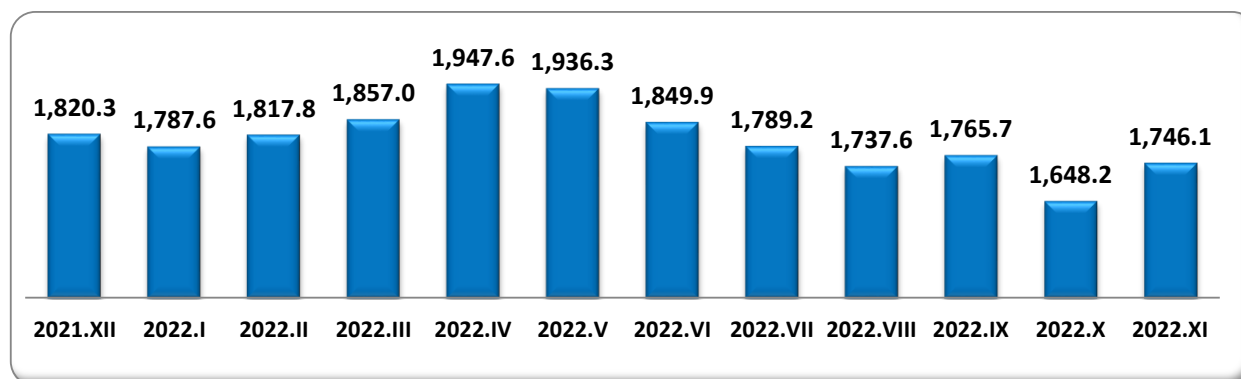
Source: Mining Division, MRPAM



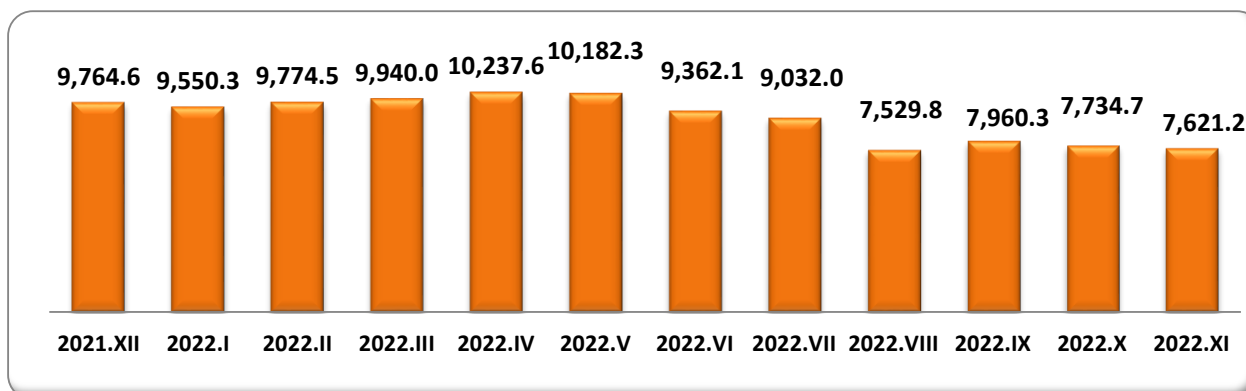
3.8. AVERAGE OF MINERAL PRICES ON THE WORLD MARKET, 2021-2022

|                            | Unit of measurement | 2021.XI  | 2022.X   | 2022.XI  | <u>2022.XI</u><br>2021.XI | <u>2022.XI</u><br>2022.X |
|----------------------------|---------------------|----------|----------|----------|---------------------------|--------------------------|
| Gold                       | \$/ounce            | 1,775.7  | 1,648.2  | 1,746.1  | 98.3%                     | 105.9%                   |
| Silver                     | \$/ounce            | 23.3     | 18.9     | 18.3     | 78.7%                     | 96.9%                    |
| Copper                     | \$/tons             | 9,777.4  | 7,734.7  | 7,621.2  | 77.9%                     | 98.5%                    |
| Zinc                       | \$/tons             | 3,369.5  | 3,136.4  | 2,959.8  | 87.8%                     | 94.4%                    |
| Blue lead                  | \$/tons             | 2,338.8  | 1,874.5  | 1,989.2  | 85.1%                     | 106.1%                   |
| Tin                        | \$/tons             | 37,941.7 | 21,258.0 | 19,406.2 | 51.1%                     | 91.3%                    |
| Molybdenum                 | \$/tons             | 42,028.5 | 37,699.1 | 41,667.4 | 99.1%                     | 110.5%                   |
| Manganese 36%              | \$/tons             | 203.5    | 172.1    | 172.3    | 84.6%                     | 100.1%                   |
| Tungsten, 99%              | \$/tons             | 41,330.3 | 41,880.0 | 39,470.0 | 95.5%                     | 94.2%                    |
| Tungsten, 65%              | \$/tons             | 17,334.3 | 16,542.0 | 15,155.3 | 87.4%                     | 91.6%                    |
| Iron ore 56%               | \$/tons             | 74.3     | 69.5     | 69.4     | 93.4%                     | 99.9%                    |
| Iron ore 60% concentrate   | \$/tons             | 101.8    | 88.8     | 83.7     | 82.2%                     | 94.2%                    |
| Fluorite concentrate AG-97 | \$/tons             | 320.0    | 362.4    | 362.4    | 113.2%                    | 100.0%                   |
| Fluorite ore MG-85         | \$/tons             | 290.0    | 355.0    | 355.0    | 122.4%                    | 100.0%                   |
| Uranium                    | \$/kg               | 99.6     | -        | -        | -                         | -                        |

3.9. AVERAGE PRICE OF GOLD ON THE WORLD MARKET, in last 12 months, by US\$/ounce

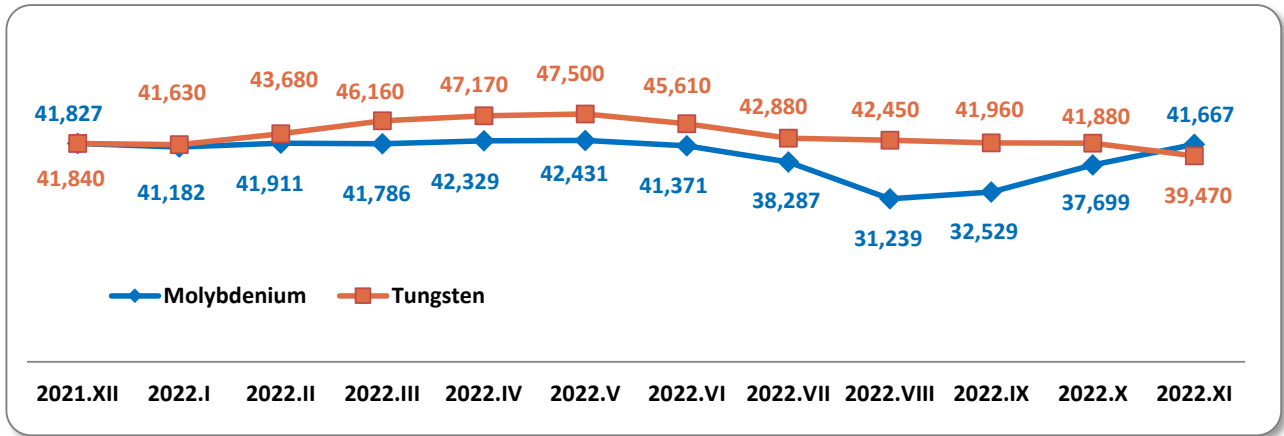


3.10. AVERAGE PRICE OF COPPER ON THE WORLD MARKET, in last 12 months, by US\$/tons

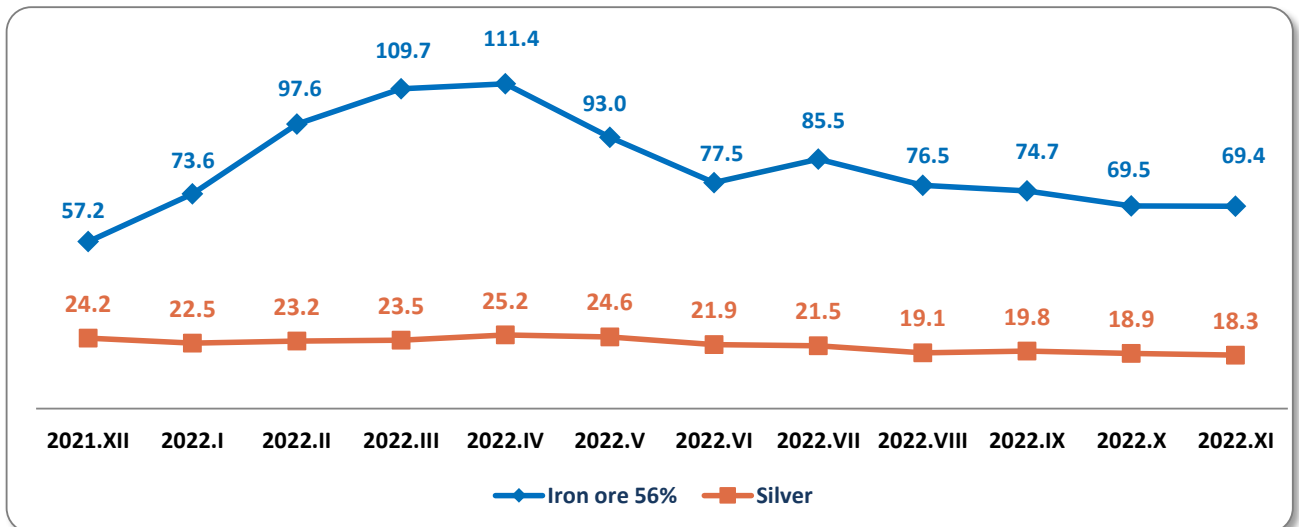


Source: [www.kitco.com](http://www.kitco.com), [www.westmetall.com](http://www.westmetall.com), [www.lme.com](http://www.lme.com), [www.asianmetal.com](http://www.asianmetal.com), [www.lndmin.com](http://www.lndmin.com), [www.umetal.com](http://www.umetal.com), [www.sxcoal.com](http://www.sxcoal.com)

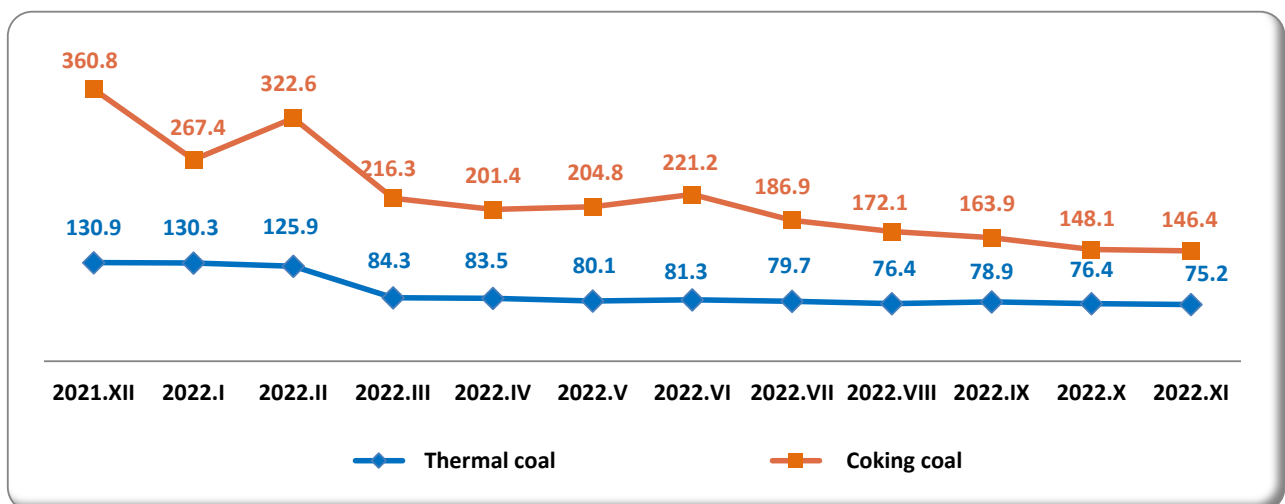
3.11. AVERAGE PRICE OF TIN, MOLYBDENUM AND TUNGSTEN ON THE WORLD MARKET, in last 12 months, by US\$/tons



3.12. AVERAGE PRICE OF IRON AND SILVER ON THE WORLD MARKET, in last 12 months, by US\$/tons and US\$/ounce



3.13. AVERAGE PRICE OF COAL ON THE WORLD MARKET, in last 12 months, by US\$/tons by US\$/tons and US\$/tons



Source: www.kitco.com, www.westmetall.com, www.lme.com, www.asianmetal.com, www.lndmin.com, www.umetal.com, www.sxcoal.com

### 3.14. LIST OF COMPANIES REGISTERED WITH INTERNATIONAL STOCK EXCHANGE COMPANIES OPERATING IN MONGOLIA'S MINING SECTOR, 2021-2022

|   | Stock exchange | Symbol   | Currency | Average price |        |         |         |                           |                          | Market value /2022.XII.05/ |
|---|----------------|----------|----------|---------------|--------|---------|---------|---------------------------|--------------------------|----------------------------|
|   |                |          |          | 2021          | 2021.X | 2022.IX | 2022.X  | <u>2022.XI</u><br>2021.XI | <u>2022.XI</u><br>2022.X |                            |
| Turquoise Hill Resources Ltd.           | NYQ            | TRQ      | USD      | 15.3          | 12.88  | 29.04   | 31.11   | 241.5%                    | 107.1%                   | 6.381B                     |
| Peabody Energy Corporation              | NYQ            | BTU      | USD      | 8.74          | 11.11  | 25.52   | 28.12   | 253.1%                    | 110.2%                   | 4.546B                     |
| Rio Tinto plc                           | LSE            | RIO.L    | GBp      | 5,599.4       | 4522.0 | 4,846.1 | 5,236.3 | 115.8%                    | 108.1%                   | 87.492B                    |
| Mongolia Energy Corporation Limited     | HKG            | 0276.HK  | HKD      | 1.03          | 0.95   | 1.4     | 1.1     | 113.7%                    | 78.8%                    | 168.72M                    |
| Mongolian Mining Corporation            | HKG            | 0975.HK  | HKD      | 2.29          | 1.90   | 1.99    | 1.87    | 98.4%                     | 94.0%                    | 2.06B                      |
| South Gobi Resources Ltd.               | HKG            | 1878.HK  | HKD      | 1.32          | 1.28   | 1.03    | 1.06    | 82.8%                     | 102.9%                   | 315.445M                   |
| Centerra Gold Inc.                      | TOR            | CG.TO    | CAD      | 10.6          | 9.96   | 6.38    | 6.78    | 68.1%                     | 106.3%                   | 1.602B                     |
| Erdene Resource Development Corporation | TOR            | ERD.TO   | CAD      | 0.4           | 0.43   | 0.28    | 0.28    | 65.1%                     | 100.0%                   | 89.145M                    |
| Entrée Resources Ltd.                   | TOR            | ETG.TO   | CAD      | 0.8           | 0.84   | 0.86    | 1.07    | 127.4%                    | 124.4%                   | 221.721M                   |
| Silver Elephant Mining Corp.            | TOR            | ELEF.TO  | CAD      | 0.33          | 0.31   | 0.52    | 0.54    | 174.2%                    | 103.8%                   | 13.12M                     |
| Steppe Gold Ltd                         | TOR            | STGO.TO  | CAD      | 1.82          | 1.31   | 1.01    | 1.01    | 77.1%                     | 100.0%                   | 73.398M                    |
| Kincora Copper Limited                  | VAN            | KCC.V    | CAD      | 0.21          | 0.13   | 0.05    | 0.06    | 45.1%                     | 120.0%                   | 6.762M                     |
| Altan Rio Minerals Limited              | VAN            | AMO.V    | CAD      | 0.148         | 0.13   | 0.04    | 0.05    | 39.7%                     | 125.0%                   | 5.433M                     |
| Xanadu Mines Limited                    | ASX            | XAM.AX   | AUD      | 0.07          | 0.03   | 0.03    | 0.03    | 100.0%                    | 100.0%                   | 40.611M                    |
| Aspire Mining Limited                   | ASX            | AKM.AX   | AUD      | 0.086         | 0.08   | 0.09    | 0.08    | 100.0%                    | 88.9%                    | 42.134M                    |
| Haranga Resources Limited               | ASX            | HAR.AX   | AUD      | -             | -      | 0.16    | 0.15    | -                         | 93.8%                    | 8.417M                     |
| Tian Poh Resources Limited              | ASX            | TPO.AX   | AUD      | 0.038         | 0.05   | 0.05    | 0.05    | 100.0%                    | 100.0%                   | 17.393M                    |
| TerraCom Limited                        | ASX            | TER.AX   | AUD      | 0.14          | 0.18   | 1.03    | 0.84    | 466.7%                    | 81.6%                    | 673.194M                   |
| Viking Mines Limited                    | ASX            | VKA.AX   | AUD      | 0.03          | 0.02   | 0.01    | 0.01    | 50.0%                     | 100.0%                   | 11.023M                    |
| Banpu Public Company Limited            | SET            | BANPU.BK | THB      | 11.83         | 10.86  | 12.51   | 12.75   | 117.4%                    | 101.9%                   | 112.44B                    |
| Petro Matad Limited                     | LSE            | MATD.L   | GBp      | 3.89          | 2.88   | 2.22    | 1.83    | 63.5%                     | 82.4%                    | 16.627M                    |
| Wolf Petroleum Limited                  | ASX            | WOF.AX   | AUD      | -             | -      | -       | -       | -                         | -                        | -                          |
| Elixir Energy Limited                   | ASX            | EXR.AX   | AUD      | 0.26          | 0.24   | 0.15    | 0.17    | 70.8%                     | 113.3%                   | 173.363M                   |

Source: [www.nyse.com](http://www.nyse.com), [www.londonstockexchange.com](http://www.londonstockexchange.com), [www.hkex.com.hk](http://www.hkex.com.hk), [www.tmx.com](http://www.tmx.com), [www.tsx.com](http://www.tsx.com), [www.asx.com.au](http://www.asx.com.au), [www.set.or.th](http://www.set.or.th)

### 3.15. LIST OF COMPANIES REGISTERED WITH INTERNATIONAL STOCK EXCHANGE COMPANIES OPERATING IN MONGOLIA'S MINING SECTOR, 2021-2022

|   | Symbol | Average price |          |          |         |                           |                          |
|---|--------|---------------|----------|----------|---------|---------------------------|--------------------------|
|   |        | 2021          | 2021.XI  | 2022.X   | 2022.XI | $\frac{2022.XI}{2021.XI}$ | $\frac{2022.XI}{2022.X}$ |
| Tavantolgoi                             | TTL    | 7,328.4       | 7,465.8  | 7,945.5  | 8,303.6 | 111.2%                    | 104.5%                   |
| Baganuur                                | BAN    | 1,021.9       | 1,160.1  | 809.9    | 827.3   | 71.3%                     | 102.1%                   |
| Shivee-Ovoo                             | SHV    | 1,580.3       | 2,009.6  | 1,549.7  | 1,612.5 | 80.2%                     | 104.1%                   |
| Aduunchuluun                            | ADL    | 805.1         | 856.9    | 732.0    | 809.5   | 94.5%                     | 110.6%                   |
| Shariin Gol                             | SHG    | 833.1         | 801.5    | 510.0    | 500.0   | 62.4%                     | 98.0%                    |
| Erdene Resource Development Corporation | ERDN   | 840.1         | 895.1    | 728.7    | 700.7   | 78.3%                     | 96.2%                    |
| Mogoin gol                              | BDL    | 8,195.8       | 11,000.0 | 7,684.6  | 9,166.7 | 83.3%                     | 119.3%                   |
| Bayanteeg                               | BTG    | 20,764.3      | -        | 21,500.0 | -       | -                         | -                        |
| Berkh-Uul                               | BEU    | 1,168.7       | 1,020.5  | -        | 1,200.0 | -                         | -                        |
| Khar Tarvagatai                         | TVT    | 2,398.1       | 3,900.0  | -        | 3,960.0 | -                         | -                        |
| Taliin Gal                              | TAL    | -             | -        | -        | -       | -                         | -                        |
| Mongol Basalt                           | MBW    | 163.6         | 178.9    | 209.3    | 211.3   | 118.1%                    | 101.0%                   |
| Mongol Ceramic                          | KEK    | 15,557.5      | -        | 2,637.8  | 1,400.0 | -                         | 53.1%                    |
| Silikat                                 | SIL    | 31.4          | 44.9     | 19.0     | -       | -                         | -                        |
| Songolon barmat                         | SSG    | 1,572.8       | 1,340.0  | 1,250.0  | -       | -                         | -                        |
| Remicon                                 | RMC    | 23.3          | 24.3     | 24.1     | 28.3    | 116.6%                    | 117.4%                   |
| Arig Tal                                | EER    | 2,309.9       | 3,046.8  | 2,720.0  | 2,831.4 | 92.9%                     | 104.1%                   |
| Niislel-Urguu                           | NUR    | 1,959.8       | -        | -        | -       | -                         | -                        |
| Erchim Bayan-Ulgii                      | BOE    | 1,784.9       | 1,820.0  | 2,875.0  | 2,687.5 | 147.7%                    | 93.5%                    |
| Khukh Gan                               | HGN    | 62.9          | 65.9     | 37.8     | 33.5    | 50.8%                     | 88.6%                    |
| Nako Tulsh                              | NKT    | 15.2          | 27.0     | -        | -       | -                         | -                        |

Source: [www.mse.mn](http://www.mse.mn)

## 3.16. COAL PRODUCTION, SALE AND EXPORT, 2020-2022, by ths.tons



## 3.17. COAL PRODUCTION, SALE AND EXPORT, 2021-2022, by ths.tons

|   | Production      | Sale            | Export          |
|---|-----------------|-----------------|-----------------|
| <b>2021</b>                                 | <b>32,317.6</b> | <b>26,741.6</b> | <b>15,932.9</b> |
| 2021.I                                      | 4,877.2         | 4,395.0         | 3,285.4         |
| 2021.II                                     | 4,207.7         | 3,550.4         | 2,612.1         |
| 2021.III                                    | 3,742.7         | 3,359.0         | 2,493.1         |
| 2021.IV                                     | 2,962.8         | 1,895.0         | 1,205.2         |
| 2021.V                                      | 2,031.4         | 1,425.0         | 850.4           |
| 2021.VI                                     | 1,478.9         | 1,432.5         | 841.5           |
| 2021.VII                                    | 1,687.1         | 1,597.1         | 1,085.2         |
| 2021.VIII                                   | 1,415.2         | 1,431.5         | 718.1           |
| 2021.IX                                     | 1,769.8         | 1,421.2         | 562.0           |
| 2021.X                                      | 2,835.3         | 1,929.9         | 725.0           |
| 2021.XI                                     | 2,725.8         | 2,467.0         | 985.9           |
| 2021.XII                                    | 2,583.7         | 1,838.0         | 569.0           |
| <b>2022.I-XI</b>                            | <b>32,936.6</b> | <b>32,828.9</b> | <b>22,700.9</b> |
| 2022.I                                      | 2,163.5         | 1,636.2         | 443.1           |
| 2022.II                                     | 1,626.4         | 1,571.1         | 503.1           |
| 2022.III                                    | 2,046.8         | 1,949.1         | 981.6           |
| 2022.IV                                     | 2,344.6         | 1,427.2         | 680.0           |
| 2022.V                                      | 1,923.6         | 1,433.9         | 832.1           |
| 2022.VI                                     | 2,129.5         | 2,287.1         | 1,757.4         |
| 2022.VII                                    | 2,304.8         | 2,936.1         | 2,434.6         |
| 2022.VIII                                   | 3,601.9         | 3,821.1         | 3,083.2         |
| 2022.XI                                     | 4,249.4         | 4,941.4         | 3,849.9         |
| 2022.X                                      | 5,128.2         | 5,295.3         | 3,954.4         |
| 2022.XI                                     | 5,417.9         | 5,530.4         | 4,181.5         |
| <b><u>2022.XI</u></b><br><b>2021.XI</b>     | <b>198.8%</b>   | <b>224.2%</b>   | <b>424.1%</b>   |
| <b><u>2022.I-XI</u></b><br><b>2021.I-XI</b> | <b>110.8%</b>   | <b>131.8%</b>   | <b>147.8%</b>   |

Source: Mining Division, MRPAM

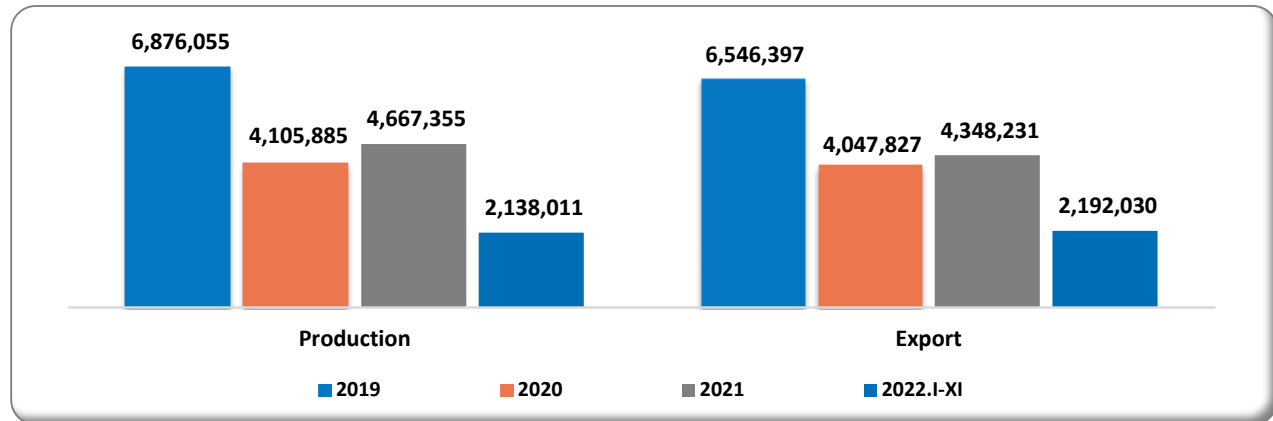
3.18. AVERAGE QUALITY OF EXPORTED COAL, 2022.XI

| Type of coal    | Classification     | Border name            | Deposit name         | Gelification index | Volatile matter    | Ash              | Sulfur value                  | Total moisture   | Calorific value         |
|-----------------|--------------------|------------------------|----------------------|--------------------|--------------------|------------------|-------------------------------|------------------|-------------------------|
|                 |                    |                        |                      | GI                 | V <sup>daf</sup> % | A <sup>d</sup> % | S <sub>t</sub> <sup>d</sup> % | W <sup>t</sup> % | Q <sup>ar</sup> kcal/kg |
| Antracite       | <i>Antracite</i>   |                        |                      |                    |                    |                  |                               |                  |                         |
|                 | Antracite          | Khangii                | Ikh govii Energy     | -                  | -                  | -                | -                             | -                | -                       |
| Raw coal        | <i>Coal</i>        |                        |                      |                    |                    |                  |                               |                  |                         |
|                 | Coking             | Khangii                | Erdenes tavan tolgoi | 87.6               | 27.6               | 16.8             | 1.0                           | 2.6              | 6815                    |
|                 |                    | Gahsuun sukhaiit       | Erdenes tavan tolgoi | 85.3               | 28.1               | 17.6             | 1.0                           | 2.1              | 6519                    |
|                 |                    |                        | Tavan tolgoi         | -                  | -                  | -                | -                             | -                | -                       |
|                 | Weak coking        | Khangii                | Dadiin khar tolgoi   | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Gahsuun sukhaiit       | Tavan tolgoi         | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Zamiin uud             | Mogoin gol           | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Shivee Khuren          | Baruun Noyon         | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    |                        | Khuren shand         | -                  | -                  | -                | -                             | -                | -                       |
|                 | Non coking         | Khangii                |                      | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Gahsuun sukhaiit       | Erdenes tavan tolgoi | 0.0                | 30.7               | 20.9             | 0.7                           | 7.1              | 5564                    |
|                 |                    | Shivee Khuren          | Khuren shand         | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    |                        | Baruun Noyon         | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    |                        | MAK                  | -                  | -                  | -                | -                             | -                | -                       |
|                 | <i>Washed coal</i> |                        |                      |                    |                    |                  |                               |                  |                         |
|                 | Coking             | Gahsuun sukhaiit       | Ukhaa Khudag         | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Khangii                | Ail bayan            | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    | Yarant                 | Tefis mining /Khuut/ | -                  | -                  | -                | -                             | -                | -                       |
|                 |                    |                        | Mo En Co             | -                  | -                  | -                | -                             | -                | -                       |
|                 | Weak coking        | Gashuun sukhaiit       | Baruun naran         | -                  | -                  | -                | -                             | -                | -                       |
| Shivee Khuren   |                    |                        | -                    | -                  | -                  | -                | -                             | -                |                         |
| Coke, semi-coke | Gahsuun sukhaiit   | Tavan tolgoi trans     | -                    | -                  | -                  | -                | -                             | -                |                         |
| Other           | Zamiin uud         | Dalan                  | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Friend ship            | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Achir/Alag togoo       | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Alag togoo             | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Gantig house           | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Goviin shandast khuleg | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Khuut /Khuuchin and/   | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Zelter                 | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Tsetsens minig         | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Khuut /Big mogul/      | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Shariin gol            | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Bichigt                | Erdeniin olz         | -                  | -                  | -                | -                             | -                | -                       |
|                 | Coal               | Zamiin uud             | Tsaidam nuur         | -                  | -                  | -                | -                             | -                | -                       |
| Khovil          |                    |                        | -                    | -                  | -                  | -                | -                             | -                |                         |
| Andiin ilch     |                    |                        | -                    | -                  | -                  | -                | -                             | -                |                         |
| Bilegt bayalag  |                    |                        | -                    | -                  | -                  | -                | -                             | -                |                         |
| Bichigt         |                    | Olgoi bulag            | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Khuut buman olz        | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Badmaarag khash        | -                    | -                  | -                  | -                | -                             | -                |                         |
|                 |                    | Erdeniin bosgo         | -                    | -                  | -                  | -                | -                             | -                |                         |

Source: Central Laboratory of Mining and Petroleum, MRPAM

# 4 | PETROLEUM

## 4.1. PETROLEUM PRODUCTION AND EXPORT, 2019-2022, by barrel



## 4.2. PETROLEUM PRODUCTION AND EXPORT, 2021-2022, by barrel

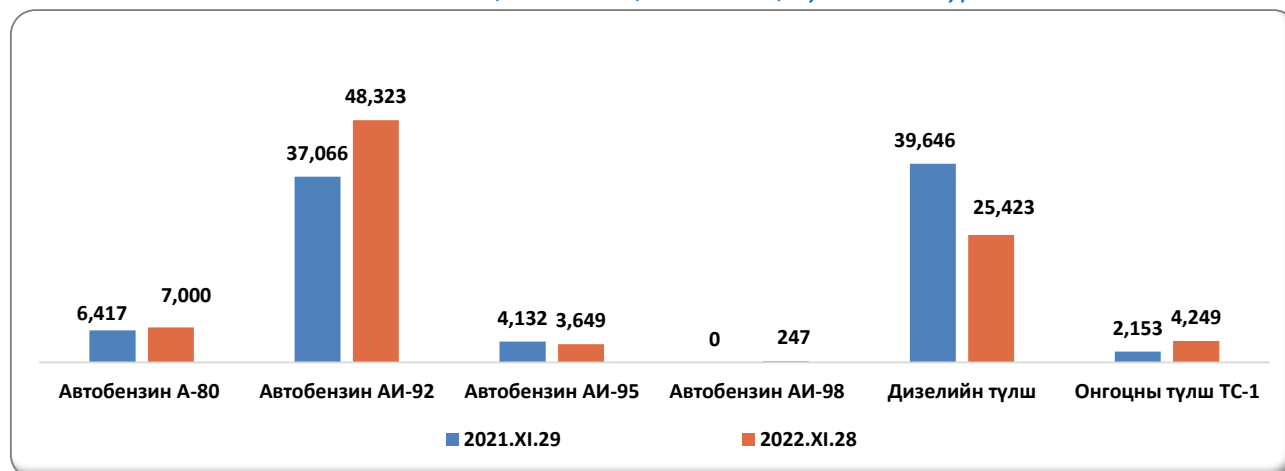
|   | Production       |                | Export           |                |
|---|------------------|----------------|------------------|----------------|
|   | Barrel           | Share to total | Barrel           | Share to total |
| <b>2021</b>                                 | <b>4,667,355</b> | <b>100%</b>    | <b>4,348,231</b> | <b>100%</b>    |
| 2021.I                                      | 527,156          | 11.3%          | 518,973          | 11.9%          |
| 2021.II                                     | 469,647          | 10.1%          | 435,559          | 10.0%          |
| 2021.III                                    | 511,305          | 11.0%          | 466,990          | 10.7%          |
| 2021.IV                                     | 496,623          | 10.6%          | 468,414          | 10.8%          |
| 2021.V                                      | 504,353          | 10.8%          | 487,367          | 11.2%          |
| 2021.VI                                     | 482,461          | 10.3%          | 480,475          | 11.0%          |
| 2021.VII                                    | 501,112          | 10.7%          | 425,415          | 9.8%           |
| 2021.VIII                                   | 414,776          | 8.9%           | 341,637          | 7.9%           |
| 2021.IX                                     | 51,634           | 1.1%           | 81,278           | 1.9%           |
| 2021.X                                      | 284,781          | 6.1%           | 329,572          | 7.6%           |
| 2021.XI                                     | 389,883          | 8.4%           | 312,552          | 7.2%           |
| 2021.XII                                    | 33,623           | 0.7%           | -                | -              |
| <b>2022.I-XI</b>                            | <b>2,138,011</b> | <b>100.0%</b>  | <b>2,192,030</b> | <b>100.0%</b>  |
| 2022.I                                      | 17,544           | 0.8%           | -                | -              |
| 2022.II                                     | 9,921            | 0.5%           | -                | -              |
| 2022.III                                    | 9,257            | 0.4%           | -                | -              |
| 2022.IV                                     | 1,000            | 0.0%           | -                | -              |
| 2022.V                                      | 1,291            | 0.1%           | -                | -              |
| 2022.VI                                     | 38,184           | 1.8%           | 114,102          | 5.2%           |
| 2022.VII                                    | 351,010          | 16.4%          | 359,232          | 16.4%          |
| 2022.VIII                                   | 457,303          | 21.4%          | 492,619          | 22.5%          |
| 2022.IX                                     | 424,993          | 19.9%          | 428,311          | 19.5%          |
| 2022.X                                      | 417,314          | 19.5%          | 364,944          | 16.6%          |
| 2022.XI                                     | 410,195          | 19.2%          | 432,823          | 19.7%          |
| <b><u>2022.XI</u></b><br><b>2021.XI</b>     | <b>105.2%</b>    | -              | <b>138.5%</b>    | -              |
| <b><u>2022.I-XI</u></b><br><b>2021.I-XI</b> | <b>46.1%</b>     | -              | <b>50.4%</b>     | -              |

Source: Petroleum Exploitation Division, MRPAM

4.3. PETROLEUM PRODUCTS IMPORTING, 2021-2022, by tons and type

|                                      | Total            | Gasoline A-80 | Gasoline AI-92 | Gasoline AI-95 | Gasoline AI-98 | Diesel fuel    | Fuel TS-1     | Lique-fied gas | Other          |
|--------------------------------------|------------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|
| <b>2021</b>                          | <b>1,806,874</b> | <b>58,628</b> | <b>490,045</b> | <b>27,672</b>  | <b>1,292</b>   | <b>976,273</b> | <b>28,797</b> | <b>22,731</b>  | <b>201,436</b> |
| 2021.I                               | 165,861          | 3,434         | 42,658         | 1,055          | 169            | 103,943        | 3,587         | 1,403          | 9,612          |
| 2021.II                              | 121,367          | 3,511         | 25,866         | 1,316          | 61             | 74,722         | 3,113         | 470            | 12,308         |
| 2021.III                             | 152,830          | 5,152         | 28,294         | 986            | 183            | 82,158         | 6,037         | 377            | 29,642         |
| 2021.IV                              | 131,984          | 4,241         | 16,839         | 1,829          | 62             | 78,651         | 1,583         | 438            | 28,340         |
| 2021.V                               | 104,381          | 5,076         | 26,219         | 2,427          | 61             | 52,253         | 2,073         | 318            | 15,954         |
| 2021.VI                              | 167,237          | 7,994         | 31,340         | 1,656          | 123            | 99,393         | 1,713         | 526            | 24,492         |
| 2021.VII                             | 170,998          | 3,787         | 46,758         | 571            | -              | 90,549         | 1,993         | 243            | 27,098         |
| 2021.VIII                            | 154,815          | 4,236         | 56,744         | 5,066          | -              | 80,081         | 832           | 3,515          | 4,340          |
| 2021.IX                              | 112,997          | 4,960         | 33,935         | 118            | -              | 63,885         | 562           | 1,898          | 7,640          |
| 2021.X                               | 130,991          | 436           | 43,728         | 5,109          | 119            | 65,044         | 1,789         | 1,929          | 12,836         |
| 2021.XI                              | 203,881          | 10,129        | 83,990         | 3,513          | 462            | 86,292         | 4,200         | 6,370          | 8,924          |
| 2021.XII                             | 189,533          | 5,672         | 53,674         | 4,025          | 51             | 99,303         | 1,314         | 5,245          | 20,250         |
| <b>2022.I-XI</b>                     | <b>1,682,855</b> | <b>31,673</b> | <b>564,558</b> | <b>21,256</b>  | <b>183</b>     | <b>846,066</b> | <b>53,034</b> | <b>39,077</b>  | <b>127,008</b> |
| 2022.I                               | 139,456          | 1,229         | 39,498         | 1,769          | -              | 83,809         | 1,805         | 2,030          | 9,317          |
| 2022.II                              | 138,921          | 4,187         | 63,713         | 1,244          | -              | 58,792         | 1,492         | 2,904          | 6,588          |
| 2022.III                             | 133,828          | 4,821         | 55,620         | 3,876          | 122            | 53,989         | 2,396         | 3,433          | 9,571          |
| 2022.IV                              | 114,043          | 2,254         | 24,945         | 3,391          | 61             | 61,773         | 11,553        | 3,276          | 6,791          |
| 2022.V                               | 172,740          | 2,382         | 59,583         | 1,949          | -              | 83,553         | 4,245         | 3,850          | 17,178         |
| 2022.VI                              | 187,104          | 4,036         | 48,840         | 2,075          | -              | 98,140         | 6,807         | 3,237          | 23,969         |
| 2022.VII                             | 136,573          | 741           | 51,376         | 1,271          | -              | 66,379         | 1,901         | 2,990          | 11,915         |
| 2022.VIII                            | 166,937          | 6,911         | 44,534         | 1,559          | -              | 90,955         | 4,277         | 9,289          | 9,413          |
| 2022.IX                              | 153,678          | 1,292         | 40,452         | 1,209          | -              | 79,785         | 8,062         | 2,058          | 20,821         |
| 2022.X                               | 164,335          | 932           | 62,672         | 2,008          | -              | 85,633         | 3,579         | 1,598          | 7,913          |
| 2022.XI                              | 175,240          | 2,891         | 73,324         | 905            | -              | 83,260         | 6,915         | 4,414          | 3,531          |
| <b>2022.XI</b><br><b>2021.XI</b>     | <b>86.0%</b>     | <b>28.5%</b>  | <b>87.3%</b>   | <b>25.7%</b>   | <b>-</b>       | <b>96.5%</b>   | <b>164.6%</b> | <b>69.3%</b>   | <b>39.6%</b>   |
| <b>2022.I-XI</b><br><b>2021.I-XI</b> | <b>104.1%</b>    | <b>59.8%</b>  | <b>129.4%</b>  | <b>89.9%</b>   | <b>14.7%</b>   | <b>96.5%</b>   | <b>193.0%</b> | <b>223.5%</b>  | <b>70.1%</b>   |

4.4. RESIDUE OF PETROLEUM PRODUCTS, 2022.XI.29, 2022.XI.28, by tons and type



Source: Petroleum Products Division, MRPAM



4.5. THE WORLD AVERAGE PRICE OF PETROLEUM PRODUCTS ARE SELLING RETAIL SALE, in last 12 months, by US\$/tons

|            | New York / WTI |                                      |         | London / BRENT |                                      |         |
|------------|----------------|--------------------------------------|---------|----------------|--------------------------------------|---------|
|            | Price          | Change (compared to previous 7 days) |         | Price          | Change (compared to previous 7 days) |         |
| 2022/01/03 | 76.08          | ↑                                    | 0.33%   | 78.98          | ↑                                    | 0.47%   |
| 2022/01/10 | 78.23          | ↑                                    | 2.83%   | 80.87          | ↑                                    | 2.39%   |
| 2022/01/17 | 83.69          | ↑                                    | 6.98%   | 86.48          | ↑                                    | 6.94%   |
| 2022/01/24 | 83.31          | ↓                                    | -0.45%  | 86.27          | ↓                                    | -0.24%  |
| 2022/01/31 | 88.15          | ↑                                    | 5.81%   | 91.21          | ↑                                    | 5.73%   |
| 2022/02/07 | 91.41          | ↑                                    | 3.70%   | 92.95          | ↑                                    | 1.91%   |
| 2022/02/14 | 93.5           | ↑                                    | 2.29%   | 95.78          | ↑                                    | 3.04%   |
| 2022/02/21 | 92.65          | ↓                                    | -0.91%  | 95.39          | ↓                                    | -0.41%  |
| 2022/02/28 | 95.72          | ↑                                    | 3.31%   | 100.99         | ↑                                    | 5.87%   |
| 2022/03/07 | 119.4          | ↑                                    | 24.74%  | 123.21         | ↑                                    | 22.00%  |
| 2022/03/14 | 103.01         | ↓                                    | -13.73% | 106.9          | ↓                                    | -13.24% |
| 2022/03/21 | 112.12         | ↑                                    | 8.84%   | 115.62         | ↑                                    | 8.16%   |
| 2022/03/28 | 105.96         | ↓                                    | -5.49%  | 112.48         | ↓                                    | -2.72%  |
| 2022/04/04 | 103.28         | ↓                                    | -2.53%  | 107.53         | ↓                                    | -4.40%  |
| 2022/04/11 | 94.29          | ↓                                    | -8.70%  | 98.48          | ↓                                    | -8.42%  |
| 2022/04/18 | 108.21         | ↑                                    | 14.76%  | 113.16         | ↑                                    | 14.91%  |
| 2022/04/25 | 98.54          | ↓                                    | -8.94%  | 102.29         | ↓                                    | -9.61%  |
| 2022/05/02 | 105.17         | ↑                                    | 6.73%   | 107.58         | ↑                                    | 5.17%   |
| 2022/05/09 | 103.09         | ↓                                    | -1.98%  | 105.94         | ↓                                    | -1.52%  |
| 2022/05/16 | 114.2          | ↑                                    | 10.78%  | 114.24         | ↑                                    | 7.83%   |
| 2022/05/23 | 110.29         | ↓                                    | -3.42%  | 110.78         | ↓                                    | -3.03%  |
| 2022/05/31 | 114.67         | ↑                                    | 3.97%   | 118.2          | ↑                                    | 6.70%   |
| 2022/06/07 | 119.4          | ↑                                    | 4.12%   | 120.46         | ↑                                    | 1.91%   |
| 2022/06/13 | 118.67         | ↓                                    | -0.61%  | 120.22         | ↓                                    | -0.20%  |
| 2022/06/21 | 110.42         | ↓                                    | -6.95%  | 115.83         | ↓                                    | -3.65%  |
| 2022/06/28 | 111.34         | ↑                                    | 0.83%   | 115.83         | ↔                                    | 0.00%   |
| 2022/07/05 | 110.14         | ↓                                    | -1.08%  | 113.31         | ↓                                    | -2.18%  |
| 2022/07/19 | 98.59          | ↓                                    | -10.49% | 105.39         | ↓                                    | -6.99%  |
| 2022/07/26 | 98.27          | ↓                                    | -0.32%  | 101.95         | ↓                                    | -3.26%  |
| 2022/08/02 | 94.28          | ↓                                    | -4.06%  | 100.38         | ↓                                    | -1.54%  |
| 2022/08/09 | 92.11          | ↓                                    | -2.30%  | 98.16          | ↓                                    | -2.21%  |
| 2022/08/16 | 88.59          | ↓                                    | -3.82%  | 93.96          | ↓                                    | -4.28%  |
| 2022/08/23 | 91.97          | ↑                                    | 3.82%   | 97.86          | ↑                                    | 4.15%   |
| 2022/08/30 | 96.94          | ↑                                    | 5.40%   | 102.64         | ↑                                    | 4.88%   |
| 2022/09/06 | 89.03          | ↓                                    | -8.16%  | 95.44          | ↓                                    | -7.01%  |
| 2022/09/13 | 88.05          | ↓                                    | -1.10%  | 94.03          | ↓                                    | -1.48%  |
| 2022/09/20 | 85.15          | ↓                                    | -3.29%  | 91.81          | ↓                                    | -2.36%  |
| 2022/09/27 | 76.86          | ↓                                    | -9.74%  | 83.04          | ↓                                    | -9.55%  |
| 2022/10/04 | 83.44          | ↑                                    | 8.56%   | 88.7           | ↑                                    | 6.82%   |
| 2022/10/11 | 91.06          | ↑                                    | 9.13%   | 96.22          | ↑                                    | 8.48%   |
| 2022/10/18 | 84.84          | ↓                                    | -6.83%  | 91.98          | ↓                                    | -4.41%  |
| 2022/10/25 | 84.92          | ↑                                    | 0.09%   | 91.56          | ↓                                    | -0.46%  |
| 2022/11/01 | 87.06          | ↑                                    | 2.52%   | 94.83          | ↑                                    | 3.57%   |
| 2022/11/08 | 91.96          | ↑                                    | 5.63%   | 97.94          | ↑                                    | 3.28%   |
| 2022/11/15 | 85.64          | ↓                                    | -6.87%  | 93.22          | ↓                                    | -4.82%  |
| 2022/11/22 | 80.17          | ↓                                    | -6.39%  | 87.82          | ↓                                    | -5.79%  |
| 2022/11/29 | 77.22          | ↓                                    | -3.68%  | 84.05          | ↓                                    | -4.29%  |

Source: [www.wtrg.com](http://www.wtrg.com), [www.bloomberg.com](http://www.bloomberg.com), [www.reuters.com](http://www.reuters.com), [www.topoilnews.com](http://www.topoilnews.com), [www.oil.in-en.com](http://www.oil.in-en.com), [www.nymex.com](http://www.nymex.com), [www.finmarket.ru](http://www.finmarket.ru), [www.ineng.org](http://www.ineng.org), [www.quandl.com](http://www.quandl.com).

4.6.RETAIL PRICE OF PETROLEUM PRODUCTS SOLD THROUGHOUT MONGOLIA, 2022.XI.01, 2022.XI.29, by MNT/litre, provinces,

|                               | Gasoline A-80  |                |                          | Gasoline AI-92 |                |                          | Gasoline AI-95 |                |                          | Diesel fuel    |                |                          |
|-------------------------------|----------------|----------------|--------------------------|----------------|----------------|--------------------------|----------------|----------------|--------------------------|----------------|----------------|--------------------------|
|                               | 2021.<br>XI.01 | 2022.<br>XI.29 | 2022.XI.29<br>2022.XI.01 | 2021.<br>XI.01 | 2022.<br>XI.29 | 2022.XI.29<br>2022.XI.01 | 2021.<br>XI.01 | 2022.<br>XI.29 | 2022.XI.29<br>2022.XI.01 | 2021.<br>XI.01 | 2022.<br>XI.29 | 2022.XI.29<br>2022.XI.01 |
| <b>NATIONAL AVERAGE PRICE</b> | <b>2,532</b>   | <b>2,532</b>   | <b>100.0%</b>            | <b>2,552</b>   | <b>2,552</b>   | <b>100.0%</b>            | <b>4,037</b>   | <b>4,029</b>   | <b>99.8%</b>             | <b>3,771</b>   | <b>3,962</b>   | <b>105.1%</b>            |
| <b>Ulaanbaatar</b>            | 2,370          | 2,370          | 100.0%                   | 2,390          | 2,390          | 100.0%                   | 3,910          | 3,910          | 100.0%                   | 3,760          | 3,850          | 102.4%                   |
| <b>Western region</b>         | <b>2,802</b>   | <b>2,802</b>   | <b>100.0%</b>            | <b>2,818</b>   | <b>2,818</b>   | <b>100.0%</b>            | <b>4,188</b>   | <b>4,150</b>   | <b>99.1%</b>             | <b>3,716</b>   | <b>4,120</b>   | <b>110.9%</b>            |
| Bayan-Ulgii                   | 2,680          | 2,680          | 100.0%                   | 2,700          | 2,700          | 100.0%                   | -              | 4,000          | -                        | 3,550          | 4,080          | 114.9%                   |
| Govi-Altai                    | 2,780          | 2,780          | 100.0%                   | 2,800          | 2,800          | 100.0%                   | 4,150          | 4,150          | 100.0%                   | 3,760          | 4,210          | 112.0%                   |
| Zavkhan                       | 2,870          | 2,870          | 100.0%                   | 2,890          | 2,890          | 100.0%                   | 4,200          | 4,200          | 100.0%                   | 3,820          | 4,140          | 108.4%                   |
| Uvs                           | 2,880          | 2,880          | 100.0%                   | 2,900          | 2,900          | 100.0%                   | 4,200          | 4,200          | 100.0%                   | 3,720          | 4,080          | 109.7%                   |
| Hovd                          | 2,800          | 2,800          | 100.0%                   | 2,800          | 2,800          | 100.0%                   | 4,200          | 4,200          | 100.0%                   | 3,730          | 4,090          | 109.7%                   |
| <b>Hangai region</b>          | <b>2,492</b>   | <b>2,492</b>   | <b>100.0%</b>            | <b>2,512</b>   | <b>2,512</b>   | <b>100.0%</b>            | <b>4,047</b>   | <b>4,047</b>   | <b>100.0%</b>            | <b>3,797</b>   | <b>3,925</b>   | <b>103.4%</b>            |
| Arkhangai                     | 2,480          | 2,480          | 100.0%                   | 2,500          | 2,500          | 100.0%                   | 4,040          | 4,040          | -                        | 3,820          | 3,910          | -                        |
| Bayankhongor                  | 2,510          | 2,510          | 100.0%                   | 2,530          | 2,530          | 100.0%                   | 4,050          | 4,050          | -                        | 3,830          | 4,070          | 106.3%                   |
| Bulgan                        | 2,470          | 2,470          | 100.0%                   | 2,490          | 2,490          | 100.0%                   | 4,040          | 4,040          | 100.0%                   | 3,760          | 3,850          | 102.4%                   |
| Uvurkhangai                   | 2,450          | 2,450          | 100.0%                   | 2,470          | 2,470          | 100.0%                   | 4,030          | 4,030          | 100.0%                   | 3,810          | 3,960          | 103.9%                   |
| Orkhon                        | 2,470          | 2,470          | 100.0%                   | 2,490          | 2,490          | 100.0%                   | 4,040          | 4,040          | 100.0%                   | 3,760          | 3,850          | 102.4%                   |
| Khuvsgul                      | 2,570          | 2,570          | 100.0%                   | 2,590          | 2,590          | 100.0%                   | 4,080          | 4,080          | 100.0%                   | 3,800          | 3,910          | 102.9%                   |
| <b>Central region</b>         | <b>2,479</b>   | <b>2,479</b>   | <b>100.0%</b>            | <b>2,499</b>   | <b>2,499</b>   | <b>100.0%</b>            | <b>4,010</b>   | <b>4,010</b>   | <b>100.0%</b>            | <b>3,784</b>   | <b>3,879</b>   | <b>102.5%</b>            |
| Tuv                           | 2,420          | 2,420          | 100.0%                   | 2,440          | 2,440          | 100.0%                   | 3,980          | 3,980          | 100.0%                   | 3,790          | 3,880          | 102.4%                   |
| Darkhan                       | 2,450          | 2,450          | 100.0%                   | 2,470          | 2,470          | 100.0%                   | 4,020          | 4,020          | 100.0%                   | 3,760          | 3,850          | 102.4%                   |
| Selenge                       | 2,480          | 2,480          | 100.0%                   | 2,500          | 2,500          | 100.0%                   | 4,030          | 4,030          | 100.0%                   | 3,760          | 3,850          | 102.4%                   |
| Govisumber                    | 2,460          | 2,460          | 100.0%                   | 2,480          | 2,480          | 100.0%                   | 4,010          | 4,010          | 100.0%                   | 3,790          | 3,880          | 102.4%                   |
| Dundgovi                      | 2,510          | 2,510          | 100.0%                   | 2,530          | 2,530          | 100.0%                   | 4,010          | 4,010          | 100.0%                   | 3,800          | 3,890          | 102.4%                   |
| Dornogovi                     | 2,500          | 2,500          | 100.0%                   | 2,520          | 2,520          | 100.0%                   | 4,030          | 4,030          | 100.0%                   | 3,820          | 3,910          | 102.4%                   |
| Umnugovi                      | 2,530          | 2,530          | 100.0%                   | 2,550          | 2,550          | 100.0%                   | 3,990          | 3,990          | 100.0%                   | 3,770          | 3,890          | 103.2%                   |
| <b>Eastern region</b>         | <b>2,520</b>   | <b>2,520</b>   | <b>100.0%</b>            | <b>2,540</b>   | <b>2,540</b>   | <b>100.0%</b>            | <b>4,030</b>   | <b>4,030</b>   | <b>100.0%</b>            | <b>3,797</b>   | <b>4,037</b>   | <b>106.3%</b>            |
| Dornod                        | 2,510          | 2,510          | 100.0%                   | 2,530          | 2,530          | 100.0%                   | 4,030          | 4,030          | 100.0%                   | 3,770          | 4,100          | 108.8%                   |
| Sukhbaatar                    | 2,550          | 2,550          | 100.0%                   | 2,570          | 2,570          | 100.0%                   | 4,070          | 4,070          | 100.0%                   | 3,860          | 4,110          | 106.5%                   |
| Khentii                       | 2,500          | 2,500          | 100.0%                   | 2,520          | 2,520          | 100.0%                   | 3,990          | 3,990          | 100.0%                   | 3,760          | 3,900          | 103.7%                   |

Source: Petroleum Products Division, MRPAM

## 4.7. RETAIL PRICE OF PETROLEUM PRODUCTS SOLD THROUGHOUT MONGOLIA, 2020-2022, by MNT/litre and type

|                   | Gasoline A-80 | Gasoline AI-92 | Gasoline AI-95 | Diesel fuel   |
|-------------------|---------------|----------------|----------------|---------------|
| 2020.I.28         | 1847          | 1925           | 2260           | 2524          |
| 2020.II.21        | 1847          | 1925           | 2260           | 2524          |
| 2020.III.31       | 1785          | 1863           | 2196           | 2515          |
| 2020.IV.28        | 1505          | 1571           | 2051           | 2230          |
| 2020.V.26         | 1443          | 1511           | 1878           | 2076          |
| 2020.VI.30        | 1443          | 1507           | 1878           | 1976          |
| 2020.VII.28       | 1463          | 1506           | 2078           | 2137          |
| 2020.VIII.25      | 1507          | 1550           | 2078           | 2123          |
| 2020.IX.29        | 1467          | 1543           | 2079           | 1980          |
| 2020.X.27         | 1463          | 1545           | 2078           | 1985          |
| 2020.XI.24        | 1457          | 1536           | 2077           | 1983          |
| 2020.XII.28       | 1455          | 1534           | 2077           | 1976          |
| 2021.I.26         | 1483          | 1559           | 2083           | 2025          |
| 2021.II.23        | 1492          | 1560           | 2174           | 2112          |
| 2021.III.30       | 1505          | 1563           | 2183           | 2123          |
| 2021.IV.27        | 1508          | 1563           | 2183           | 2123          |
| 2021.V.31         | 1513          | 1545           | 2163           | 2233          |
| 2021.VI.29        | 1513          | 1545           | 2313           | 2262          |
| 2021.VII.27       | 1812          | 1846           | 2418           | 2352          |
| 2021.VIII.31      | 2112          | 2144           | 2513           | 2545          |
| 2021.IX.28        | 2129          | 2161           | 2702           | 2545          |
| 2021.X.26         | 2150          | 2181           | 2608           | 2541          |
| 2021.XI.29        | 2256          | 2303           | 2759           | 2778          |
| 2021.XII.28       | 2370          | 2397           | 2864           | 2883          |
| 2022.I.31         | 2370          | 2416           | 2855           | 2836          |
| 2022.III.01       | 2419          | 2464           | 2954           | 2924          |
| 2022.III.29       | 2516          | 2560           | 3144           | 3117          |
| 2022.IV.26        | 2517          | 2561           | 3353           | 3369          |
| 2022.V.31         | 2517          | 2561           | 3351           | 3425          |
| 2022.VI.28        | 2994          | 2559           | 4000           | 3736          |
| 2022.VII.26       | 2996          | 2559           | 4341           | 4045          |
| 2022.VIII.30      | 2525          | 2558           | 4025           | 3736          |
| 2022.IX.27        | 2525          | 2554           | 4030           | 3587          |
| 2022.XI.01        | 2532          | 2552           | 4037           | 3771          |
| 2022.XI.29        | 2532          | 2552           | 4029           | 3962          |
| <b>2022.XI.29</b> |               |                |                |               |
| <b>2022.XI.01</b> | <b>100.0%</b> | <b>100.0%</b>  | <b>99.8%</b>   | <b>105.1%</b> |
| <b>2022.XI.29</b> |               |                |                |               |
| <b>2021.XI.29</b> | <b>112.2%</b> | <b>110.8%</b>  | <b>146.0%</b>  | <b>142.6%</b> |
| <b>2022.XI.29</b> |               |                |                |               |
| <b>2020.XI.24</b> | <b>173.8%</b> | <b>166.1%</b>  | <b>194.0%</b>  | <b>199.8%</b> |

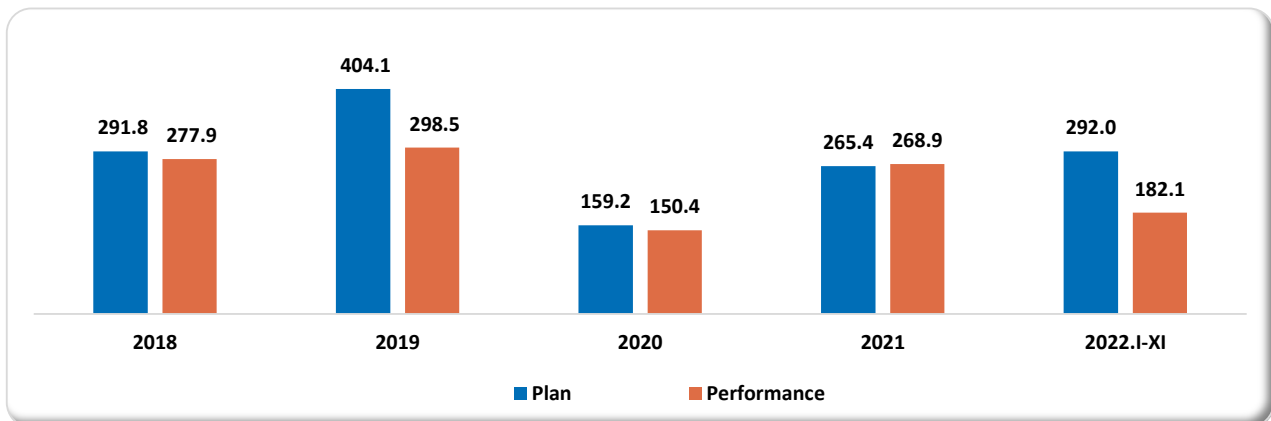
Source: Petroleum Products Division, MRPAM

# 5 | STATE BUDGET REVENUE

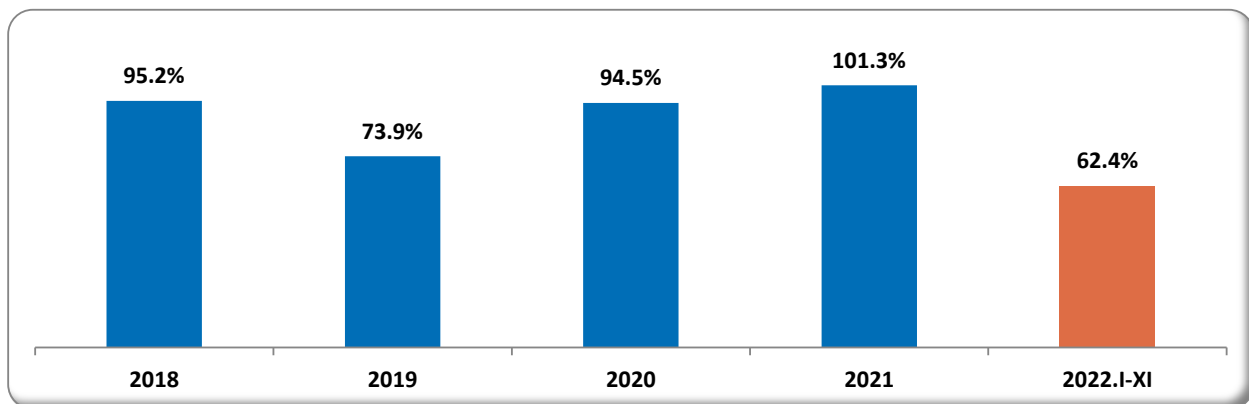
## 5.1. BUDGET REVENUE PLAN AND PERFORMANCE OF MRPAM, 2022, by million.MNT and income type

|                                     | Plan (2022)      | 2022.I-XI        |                  |
|-------------------------------------|------------------|------------------|------------------|
|                                     |                  | Performance      | Performance rate |
| <b>TOTAL</b>                        | <b>291,997.0</b> | <b>182,144.3</b> | <b>62.4%</b>     |
| License fee                         | 31,400.0         | 32,862.9         | 104.7%           |
| Reimbursement                       | 17,500.0         | 1,497.9          | 8.6%             |
| Petroleum export revenue            | 215,447.0        | 129,688.6        | 60.2%            |
| Service revenue (petroleum)         | 1,630.0          | 2,257.8          | 138.5%           |
| Service revenue (mineral resources) | 1,020.0          | 1,294.2          | 126.9%           |
| Tender revenue                      | 25,000.0         | 14,543.0         | 58.2%            |

## 5.2. BUDGET REVENUE OF MRPAM, 2018-2022, by billion MNT



## 5.3. BUDGET PERFORMANCE RATE OF MRPAM, 2018-2022



Source: Finance and Investments Division, MRPAM



*This bulletin is updated monthly and published on the Mineral Resources and Petroleum Authority's website [www.mrpam.gov.mn](http://www.mrpam.gov.mn)*



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