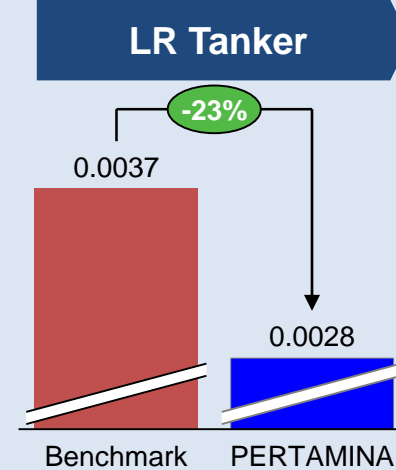
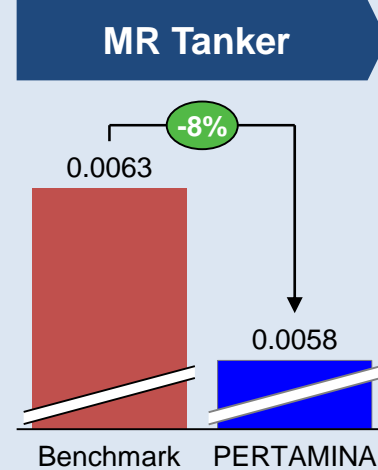
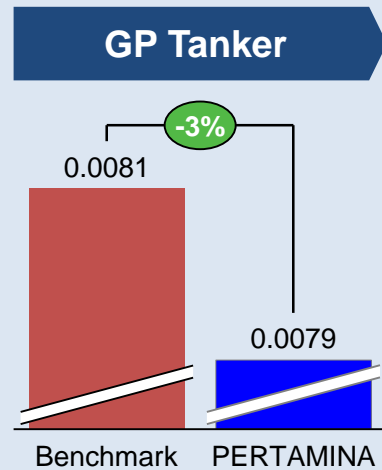


# Perbandingan Shipping Cost (USD/KL/Miles) PERTAMINA vs Benchmark

## Shipping Cost (USD/KL/Mile)

Confidential and Proprietary

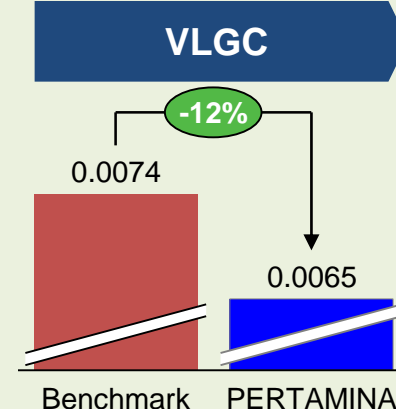
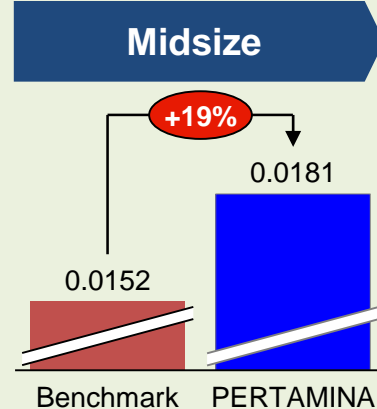
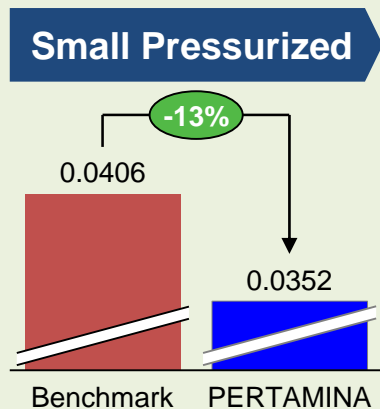
### Crude



#### Keterangan:

- Perhitungan shipping cost mengacu kepada trayek domestik:
  - GP Tanker: Pangkalan Susu – Cilacap (1,442 Nm)
  - MR Tanker: Pangkalan Susu – Cilacap (1,442 Nm)
  - LR Tanker: Arun – TPPI Tuban (1,195 Nm)
- TC Rate Benchmark mengacu data Drewry Shipping Insight 6 Mei 2020
- TC Rate Pertamina mengacu data rata-rata charter rate untuk masing-masing tipe kapal GP, MR, dan LR Tanker
- Data parameter bunker consumption mengacu data kapal domestik Pertamina
- Data port charges mengacu data tarif port charges Pertamina

### LPG



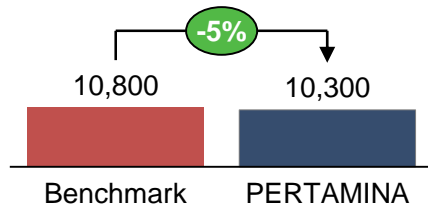
#### Keterangan:

- Perhitungan shipping cost mengacu kepada trayek domestik:
  - Small Pressurized: Kalbut - Amurang (924 Nm)
  - Midsized: Tg Sekong - Makassar (799 Nm)
  - VLGC: Tik Semangka – Jabung Petrochina (705 Nm)
- TC Rate Benchmark mengacu data Drewry Shipping Insight 6 Mei 2020
- TC Rate Pertamina mengacu data rata-rata charter rate untuk masing-masing tipe kapal Small LPG, Midsized, dan VLGC
- Data parameter bunker consumption mengacu data kapal domestik Pertamina
- Data port charges mengacu data tarif port charges Pertamina

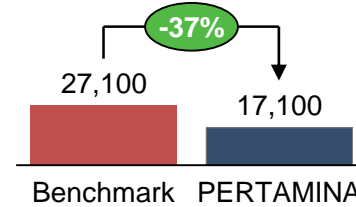
# Profil TC Rate PERTAMINA vs Benchmark



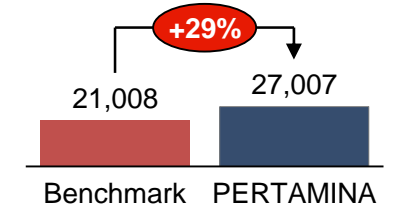
## GP Tanker



## LR Tanker



## Midsized



**Coated**

	7,900	7,900	7,300	7,300	7,300	7,300	7,300	7,300
5-6,000	7,900	7,900	7,300	7,300	7,300	7,300	7,300	7,300
8-9,000	8,900	8,900	8,900	8,900	8,900	8,900	8,900	8,900
10-12,000	9,400	9,400	9,500	9,500	9,500	9,500	9,500	9,500
14-16,000	10,300	10,300	10,500	10,500	10,500	10,500	10,500	10,500
18-20,000	10,500	10,500	10,900	10,900	10,900	10,600	10,800	10,800
22-25,000	11,400	11,400	11,600	11,600	11,600	11,200	11,400	11,450
35-37,000	13,200	13,625	15,000	15,500	14,000	13,800	14,500	14,450
40-50,000	14,500	14,925	17,000	18,000	16,500	16,000	17,000	16,875

*Estimated representative time charter rates are based on a 12-month period with prompt delivery in \$ per day or sailed in time charter equivalent on today's market, assuming that the vessel is operated by an owner/operator with contractual requirements representing at least 50% of its business. All figures have been rounded off to the nearest 100*

Source: Drewry Maritime Research

## Crude Tanker Market Data

**TC rates (\$/day)**

	Apr 19	YTD 2019	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	YTD 2020
<b>1-year (5-year old)</b>								
75,000 dwt	15,300	14,800	19,300	19,300	17,300	18,500	21,500	19,100
110,000 dwt	20,000	19,100	27,500	28,000	22,000	24,500	33,800	27,100
150,000 dwt	23,500	23,800	33,500	34,500	30,800	35,500	47,300	37,000
300,000 dwt	32,000	32,300	48,800	48,800	35,000	51,000	70,100	51,200

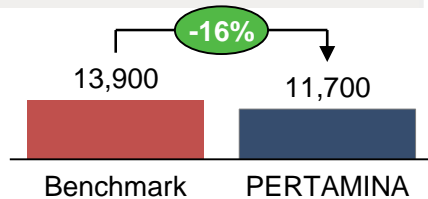
**LPG TC rates - 5 year old vessel (\$/pcm)**

Vessel type	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20
VLGC (75,000 cbm)	1,298,700	1,282,500	1,280,500	1,189,900	1,067,000
LGC (59,000 cbm)	968,200	966,500	974,500	957,000	935,000
MGC (28-40,000 cbm)	790,400	834,500	838,000	804,500	785,400
20,000 cbm s/r	615,700	658,500	678,000	662,500	639,000
7,500 cbm p/r	332,000	328,000	320,000	318,000	316,000
3,000 cbm s/r	286,300	290,000	289,000	290,000	289,200
3,000 cbm p/r	244,600	243,300	238,400	233,900	231,700

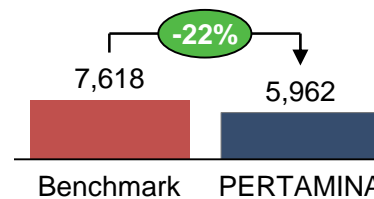
*s/r = semi refrigerated; p/r = pressurised*

Source: Drewry Maritime Research

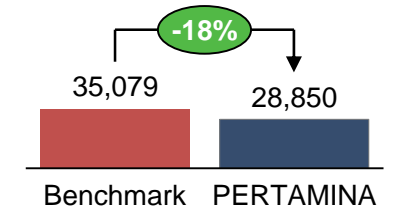
## MR Tanker



## Small Pressurized



## VLGC



**1-year TC rates (\$/day)**

Vessel type	Apr 19	YTD 2019	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	YTD 2020
<b>5-year old</b>								
MR1	13,000	12,800	14,500	14,800	13,800	13,800	14,500	14,200
MR2	14,000	13,700	16,000	16,500	15,500	16,000	16,600	16,100
LR1	15,500	15,000	19,000	19,000	17,000	18,300	22,200	19,100
LR2	21,500	19,800	24,000	24,500	21,000	24,000	34,100	25,900
<b>10-year old</b>								
MR1	12,800	12,600	14,300	14,500	13,500	13,500	14,200	13,900
MR2	13,800	13,400	15,800	16,300	15,300	15,800	16,300	15,900
LR1	15,300	14,800	18,800	18,800	16,800	18,000	22,000	18,900
LR2	21,300	19,500	23,800	24,300	20,800	23,800	33,900	25,700

Source: Drewry Maritime Research

**LPG TC rates - 5 year old vessel (\$/pcm)**

Vessel type	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20
VLGC (75,000 cbm)	1,298,700	1,282,500	1,280,500	1,189,900	1,067,000
LGC (59,000 cbm)	968,200	966,500	974,500	957,000	935,000
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7,500 cbm p/r	332,000	328,000	320,000	318,000	316,000
3,000 cbm s/r	286,300	290,000	289,000	290,000	289,200
3,000 cbm p/r	244,600	243,300	238,400	233,900	231,700

*s/r = semi refrigerated; p/r = pressurised*

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Vessel type	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20
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3,000 cbm s/r	286,300	290,000	289,000	290,000	289,200
3,000 cbm p/r	244,600	243,300	238,400	233,900	231,700

*s/r = semi refrigerated; p/r = pressurised*

Source: Drewry Maritime Research