

Annexes

Annex I. Summary of the Recommendations by Rangarajan and Kirit Parikh Committees and Status as of 2018

Recommendations	Decision
Rangarajan Committee	
Base the RGP for petrol and diesel on the TPP with weightage 80% of IPP and 20% of EPP.	Shifted the RGP of petrol and diesel to the TPP effective 16 June 2006.
Reduce the customs duty on petrol and diesel from 10% to 7.5%.	Customs duties reduced to 7.5% effective 15 June 2006. (Current duty is 2.5% effective 25 June 2011)
Restrict PDS SKO supplies to families	Not implemented
Adjust retail selling price of domestic LPG to the market level and eliminate subsidy altogether.	Not implemented
Increase OIBD cess from Rs1,800/MT to Rs4,500/MT to meet the OMCs' under-recovery	The government enhanced cess Rs2,500/MT effective 1 March 2006. Effective 14 March 2012, the government further increased it to Rs4,500/MT; by the end of financial year 2016, the government made it on ad valorem basis at 20%.
Kirit Parikh Committee	
Conduct better targeting of subsidy through implementing a transparent and effective distribution system for domestic LPG and PDS kerosene.	Government implemented the DBT for domestic LPG across the country on January 2015; and efforts were on for DBT to PDS kerosene in a phased manner.
Rationalise the allocation of PDS kerosene through rural electrification, LPG, and piped gas availability.	Government has accelerated universal electrification and incentivises states for their reduced up-take of kerosene.
Determine, through the market, the price of petrol and diesel, both at the refinery gate and at the retail levels.	Market-determined pricing for petrol and diesel was implemented.
Increase the price of PDS kerosene by Rs6/litre.	Increased the RSP of PDS kerosene by Rs3/litre
Increase the price of domestic LPG by at least Rs100/cylinder.	Increased the RSP of domestic LPG by Rs35/cylinder

DBT = direct benefit transfer, EPP =, IPP = import parity price, LPG = liquefied petroleum gas, OIBD = Oil Industry Development Board, PDS = public distribution system, RGP = refinery gate price, RSP = retail selling price, SKO = superior kerosene oil, TPP = trade parity price.

Source: Kirit Parikh Committee (2013).

Annex II. Notified Rates of Sales Tax/VAT for the Products (as of 31 March 2016)

States	Crude Oil (%)	Natural Gas (%)	Liquefied Petroleum Gas		Superior Kerosene Oil	
			Domestic LPG (%)	Non-domestic LPG (%)	PDS (%)	Non-PDS (%)
Andhra Pradesh	5	14.5	5	14.5	5	14.5
Arunachal	4	20	4	12.5	4	12.5
Assam	5	14.5	Nil	9	2	12.5
Bihar	5	20	1	14.5	5	5
Chandigarh	4	5	Nil	12.5	5	12.5
Chhattisgarh	5	25	Nil	5	4	14.5
Delhi	5	Nil	Nil	5	5	12.5
Goa	5	12.5	Nil	12.5	5	12.5
Gujarat	4, additional 1% TTO	12.5, additional tax 2.5% TTO	4, 1% on taxable turnover	Nil	Nil	25
Haryana	5	12.5, Additional tax on VAT 5%	Nil	12.5 (additional tax on VAT 5%)	Nil	12.5
Himachal Pradesh	4	4	4	13.75	Nil	
Jammu and Kashmir	5	5	Nil	13.5	5	13.5
Jharkhand	5	14	5	14	2	14
Karnataka	Nil	15	1	14.5	6	14.5
Kerala	5	Nil	5	14.5	5	14.5
Madhya Pradesh	5	14	5	14	5	14
Maharashtra	5	13	3	12.5	3	12.5
Manipur	5	14	5	13.5	Nil	5
Meghalaya	4	14.5	Nil	14.5	Nil	14.5
Mizoram	5	14	1.79	8	Nil	-
Nagaland	5, surcharge on tax 5%	5, surcharge on tax 5%	5, surcharge on tax 5%	12, surcharge on tax 5%	5, surcharge on tax 5%	15, surcharge on tax 5%
Orissa	5	15		14.5	Nil	14.5
Puducherry	5	5	1 for DBTL, 0.5 for non-DBTL	14.5	Nil	14.5
Punjab	4.5, surcharge on tax 10%	5.5, surcharge on tax 10%	4	13, surcharge on tax 10%	5.5, surcharge on tax 10%	13, surcharge on tax 10%

States	Crude Oil (%)	Natural Gas (%)	Liquefied Petroleum Gas		Superior Kerosene Oil	
			Domestic LPG (%)	Non-domestic LPG (%)	PDS (%)	Non-PDS (%)
Rajasthan	5	5	Nil	14.5	Nil	Nil
Sikkim	4.5	4.5	4.5	13.5	4.5	13.5
Silvassa	5	13	5	12.5	5	12.5
Tamil Nadu	5	5	Nil	14.5	5	25
Telangana	5	14.5	5	14.5	5	14.5
Tripura	5	14.5	1.5	14.5	Nil	14.5
Uttar Pradesh	4	21, additional tax on taxable turnover 5%	Nil	12.5, additional tax on taxable turnover 2%	4	12.5
Uttarakhand	5	20	5	13.5	Nil	Nil
West Bengal	5	5	Nil	5%, cess 1,000/MT	Nil	14.5

DBTL = direct benefit transfer for LPG, LPG = liquefied petroleum gas, MT = metric ton, PDS = public distribution system.

Source: MoPNG (2016a).

Annex III. Notified Coal Freight Rates by the Indian Railways for 2015/16

Distance (km)	Coal Railway Freight Rates (Rs/Ton)
0-125	205.6
126-150	250.7
151-175	281.0
176-200	314.2
201-225	345.0
226-250	378.0
251-275	411.1
276-300	443.7
301-325	474.6
326-350	506.6
351-375	538.7
376-400	571.3
401-425	614.2
426-450	636.8
451-475	668.9
476-500	702.4
501-550	768.6
551-600	834.3
601-650	899.4
651-700	964.3
701-750	1,029.6
751-800	1,093.7
801- 850	1,158.0
851-900	1,221.9
901-950	1,285.7
951-1,000	1,349.5
1,001-1,100	1,478.4
1,101-1,200	1,607.6
1,201-1,300	1,736.2
1,301-1,400	1,864.1
1,401-1,500	1,992.0
1,501-1,625	2,116.1
1,626-1,750	2,279.0
1,751-1,875	2,343.5
1,876-2,000	2,499.7
2,001-2,125	2,524.9
2,126-2,250	2,673.4
2,251-2,375	2,697.6
2,376-2,500	2,839.5
2,501-2,625	2,884.2
2,626-2,750	3,021.5
2,751-2,875	3,064.3

Distance (km)	Coal Railway Freight Rates (Rs/Ton)
2,876–3,000	3,197.5
3,001–3,125	3,238.7
3,126–3,250	3,368.4
3,251–3,375	3,408.7
3,376–3,500	3,534.8

Source: Indian Railways (2015).

Annex IV. Representative Price Build-up of Domestic LPG in Delhi (as of 15 August 2015)

Sl. No.	Elements	Unit	Effective 1 August 2015
1	FOB price at Arab Gulf of LPG ^a	\$/MT	405.82
2	Add: ocean freight from AG to Jamnagar	\$/MT	31.64
3	C&F (cost and freight) price ^b	\$/MT	437.46
	OR	Rs/cylinder	395.20
4	Import charges (insurance/ocean loss/LC charge/port dues)	Rs/cylinder	4.28
5	Customs duty	Rs/cylinder	NIL
6	Import parity price ^c (sum of 3 to 5)	Rs/cylinder	399.49
7	Refinery transfer price for domestic LPG ^d (price paid by the oil marketing companies to refineries)	Rs/cylinder	399.49
8	Add: Storage/distribution cost and return on investment ^e	Rs/cylinder	9.96
9	Add: bottling charges	Rs/cylinder	20.58
10	Add: charges for cylinder cost ^f	Rs/cylinder	18.11
11	Add: inland freight	Rs/cylinder	30.68
12	Bottling plant cost before stock loss and working capital (sum of 7 to 11)	Rs/cylinder	478.81
13	Add: Cost of Working Capital ^e	Rs/cylinder	2.37
14	Cost Price at LPG Bottling Plant (sum of 12 to 13)	Rs/cylinder	481.18
15	Add: delivery charges	Rs/cylinder	10.00
16	Add: state-specific costs ^d	Rs/cylinder	Nil
17	Add: uncompensated costs (import costs, recovery for non-revision, rounding-off and delivery charges) ^d	Rs/cylinder	49.09
18	Market determined price (sum of 14 to 17)	Rs/cylinder	540.28
19	Add: VAT (including VAT on distributor commission) applicable for Delhi ^d	Rs/cylinder	0.00
20	Add: distributor commission	Rs/cylinder	44.88
21	Retail selling price (sum of 18 to 20)	Rs/cylinder	585.16
22	Retail selling price at Delhi (rounded)	Rs/cylinder	585.00
23	Less: cash compensation to consumer under DBTL (including impact of uncompensated cost to OMCs) ^k	Rs/cylinder	167.18
24	Effective cost to consumer after subsidy (22–23)	Rs/cylinder	417.82

^a FOB (free on board) of LPG is weighted average of Saudi Aramco contract price for Butane (60%) and Propane (40%) for previous month and includes daily quotes of premium/discount (published by Platts 'Gaswire') averaged for the previous month.

^b Import charges comprise insurance, ocean loss, LC charges, and port dues applicable on import of LPG.

^c Import parity price (IPP) represents the price that importers would pay in case of actual import of product at the respective Indian ports.

^d This is the price paid by the oil marketing companies (OMCs) to domestic refineries for purchase of finished petroleum products at the refinery gate.

^e Storage/distribution cost and return on investment as fixed under notified 'PAHAL (DBTL) Scheme, 2014'.

^f The cost incurred to fill LPG in 14.2 kg cylinders as per notified 'PAHAL (DBTL) Scheme, 2014'.

- ^g Interest on working capital for 18 days stock holding at SBI prime lending rate as fixed under notified 'PAHAL (DBTL) Scheme, 2014'.
- ^h To neutralise the under-recoveries to the oil companies caused by various irrecoverable/non-recoverable taxes and levies of state/union territories/municipal corporations, a state-specific surcharge/cost is considered in the selling prices of petroleum products. In the case of Delhi, it is nil.
- ⁱ In the price build-up, OMCs are charging consumers on account of import costs, recovery for non-revision in prices, rounding-off and differential delivery charges of Rs7.9/cylinder. All these costs are not compensated to OMCs as per the PAHAL (DBTL) scheme.
- ^j Currently VAT at Delhi is nil and varies from state to state.
- ^k Under the DBTL Scheme, the difference between the price of domestic. subsidised and non-subsidised LPG is being transferred to bank account of consumers by the OMCs. This also includes the uncompensated amount which is borne by the OMCs.

Source: IOCL (2015).

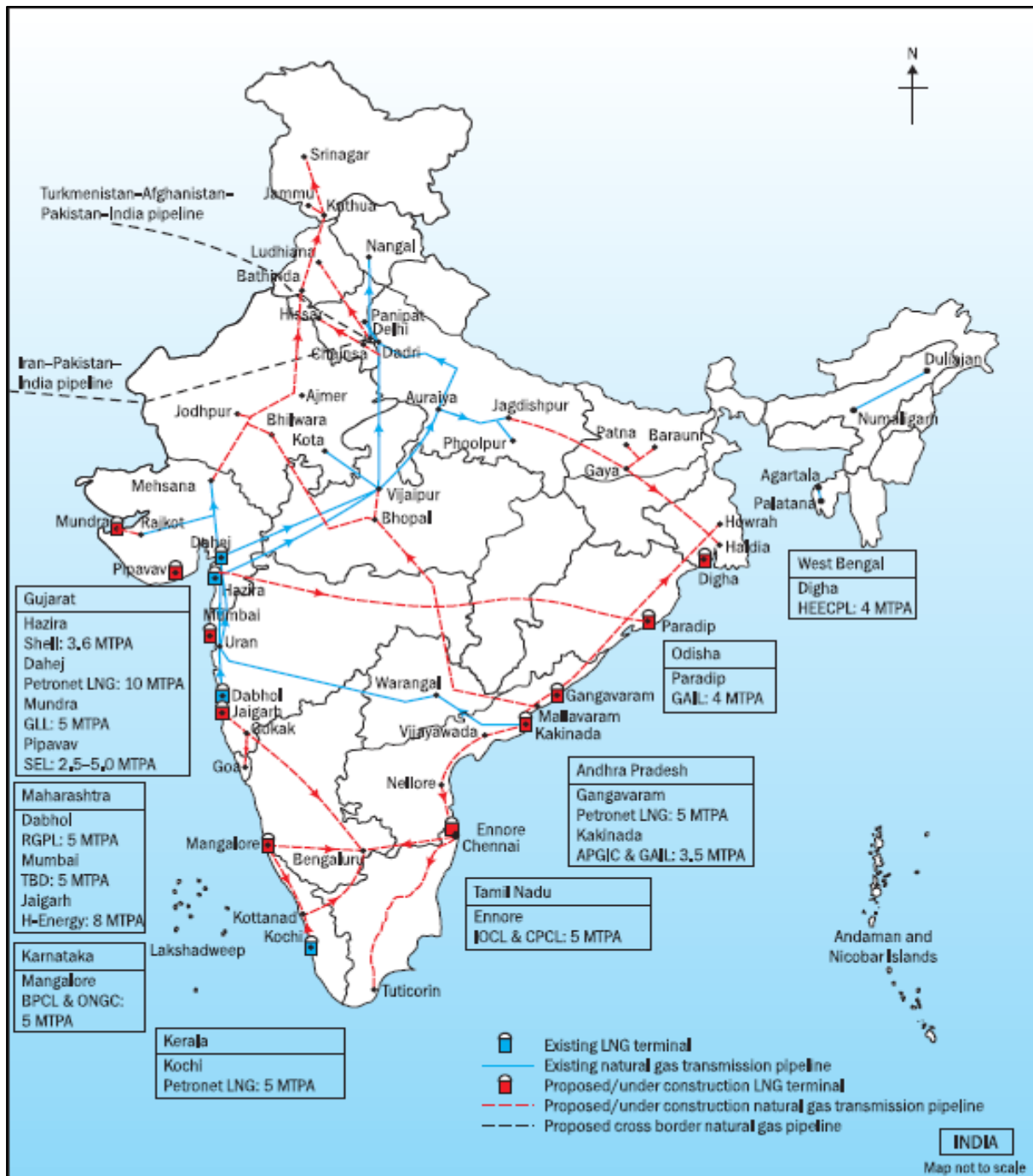
Annex V. Representative Price Build-up of PDS Kerosene in Mumbai (as of 15 August 2015)

Sr. No.	Elements	Unit	Effective 1 August 2015
1	FOB price at Arab Gulf of jet/kero (kerosene) ¹¹	\$/bbl	64.72
2	Add: Ocean freight from AG to Indian ports	\$/bbl	1.87
3	C&F (cost and freight) price ¹²	\$/bbl	66.59
	OR	Rs/litre	26.28
4	Import charges (insurance/ocean loss/LC charge/port dues)	Rs/litre	0.22
5	Customs duty ¹³	Rs/litre	NIL
6	Import parity price (at 29.5° C) (Sum of 3 to 5)¹⁴	Rs/litre	26.50
7	Refinery transfer price (RTP) for PDS kerosene (Price paid by the oil marketing companies [OMCs] to refineries)	Rs/litre	26.50
8	Add: Inland freight and delivery charges	Rs/litre	0.68
9	Add: State-specific costs ¹⁵	Rs/litre	0.73
10	Add: Marketing cost of OMCs	Rs/litre	0.36
11	Add: Marketing margin of OMCs	Rs/litre	0.23
12	Total Cost Price (sum of 7 to 11) -before excise duty, VAT, and wholesale and retailer commission	Rs/litre	28.50
13	Less: Under-recovery to OMCs ¹⁶	Rs/litre	14.95
14	Price charged to dealers (depot price) - excluding excise duty and VAT (12-13)	Rs/litre	13.55
15	Add: Excise duty (including education cess) ¹⁷	Rs/litre	0.00
16	Add: Wholesale and retailer commission and other charges fixed by state government	Rs/litre	1.24
17	Add: VAT (including VAT on wholesale and retailer commission) applicable for Mumbai	Rs/litre	0.44
18	Retail selling price at Mumbai (sum of 14 to 17)	Rs./Litre	15.24

Source: IOCL (2015).

¹¹ FOB (Free on Board) daily quotes of Jet/Kerosene at Arab Gulf including premium / discount published by Platts and Argus publications are averaged for previous month.
FOB (Free on Board) daily quotes of Jet/Kerosene at Arab Gulf including premium / discount published by Platts and Argus publications are averaged for previous month.
Excise & Port dues applicable on import of product.
Import of kerosene at the respective Indian ports. Import Parity Principle is as per the 'PDS Kerosene and LPG (Domestic) Subsidy Scheme, 2002'.
IPP represents the price that importers would pay in case of actual import of kerosene at the respective Indian ports. Import Parity Principle is as per the 'PDS Kerosene and LPG (Domestic) Subsidy Scheme, 2002'. It is considered in the Selling Prices of petroleum products.
In order to neutralise the under-recoveries to the Oil Companies caused by various irrecoverable/non-recoverable Taxes and Levies of State/Union Territories/Municipal Corporations, a State Specific Surcharge/Cost is considered in the Selling Prices of petroleum products.

Annex VI. Natural Gas Infrastructure Map of India



Source: TERI (2016).

Annex VII. Representative Price Build-up of Domestic Coal for Gandhi Nagar Thermal Power Station, Gujarat in 2015/16 (Rs/MT)

Elements	Effective for 2015/16
Weighted average base price of domestic coal (to Gandhinagar thermal power plant, Gujarat)	1,429
Royalty	200
Excise duty	98
Total price after excise duty and tax	1,728
Sizing charge, surface transportation charge, etc.	60
Clean energy cess	200
Stowing excise duty	10
Other duties	233
Price before CST/VAT	2,231
CST	45
Total price on coal	2,275
Basic railway freight (RF)	1,510
Dynamic pricing charge (DPC) @ 15% of RF	227
Development surcharge (DS) (at 5% of basic RF and DPC)	87
Service tax (@3.708% of RF, DPC, and DS)	473
Total railway freight	2,297
Total delivered cost of coal	4,572

CST = central sales tax, VAT = value added tax.

Source: TERI analysis.

Annex VIII. Representative Price Build-up of Imported Coal for Gandhi Nagar Thermal Power Station, Gujarat in 2015/16 (Rs/MT)

Elements	Effective for 2015/16
CIF price of coal (to Gandhinagar thermal power plant, Gujarat)	5,664
Port handling charges	320
Customs duty	255
Price before central sales tax (CST)	6,239
CST (2%)	125
Total price (Rs/MT)	6,364
Basic railway freight (RF) (Rs/MT)	510
Dynamic pricing charge (DPC) at 15% of RF	77
Development surcharge (DS) (at 5% of basic RF and DPC) (Rs/MT)	29
Service tax (at 3.708% of RF, DPC, and DS) (Rs/MT)	23
Total railway freight (Rs/MT)	638
Total imported cost (Rs/MT)	7,002

Source: Authors' compilation.