

Energy Statistics & Energy Balance Bhutan

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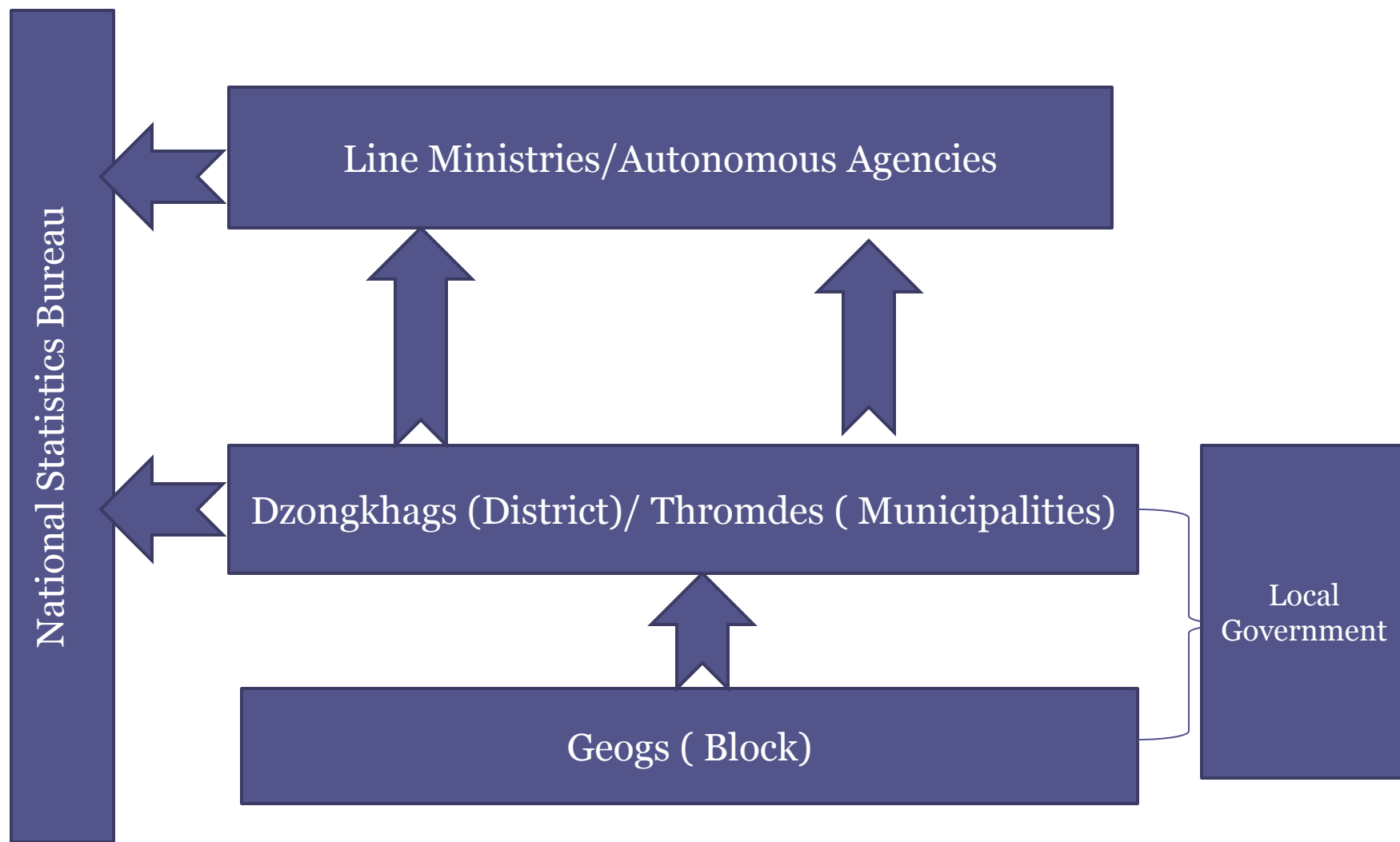
Presentation Outline

- Background
- National Institutional Set-up
- Sources/ Supply of Energy
- Energy Demand
- Energy Balance
- Initiatives and Challenges

Background

- 2014 National Accounts Statistics
 - GDP : US Dollar 1.9 billion (Avg. Growth Rate of about 7%)
 - GDP Per Capita: US Dollar 2,612
 - Primary Sector:17%
 - Secondary Sector:41%
 - Tertiary Sector:42%
- Sources of Energy
 - Fossil Fuel (52%)
 - Hydropower (42%)
 - Biomass (6%)

3. National Organizational Set-up

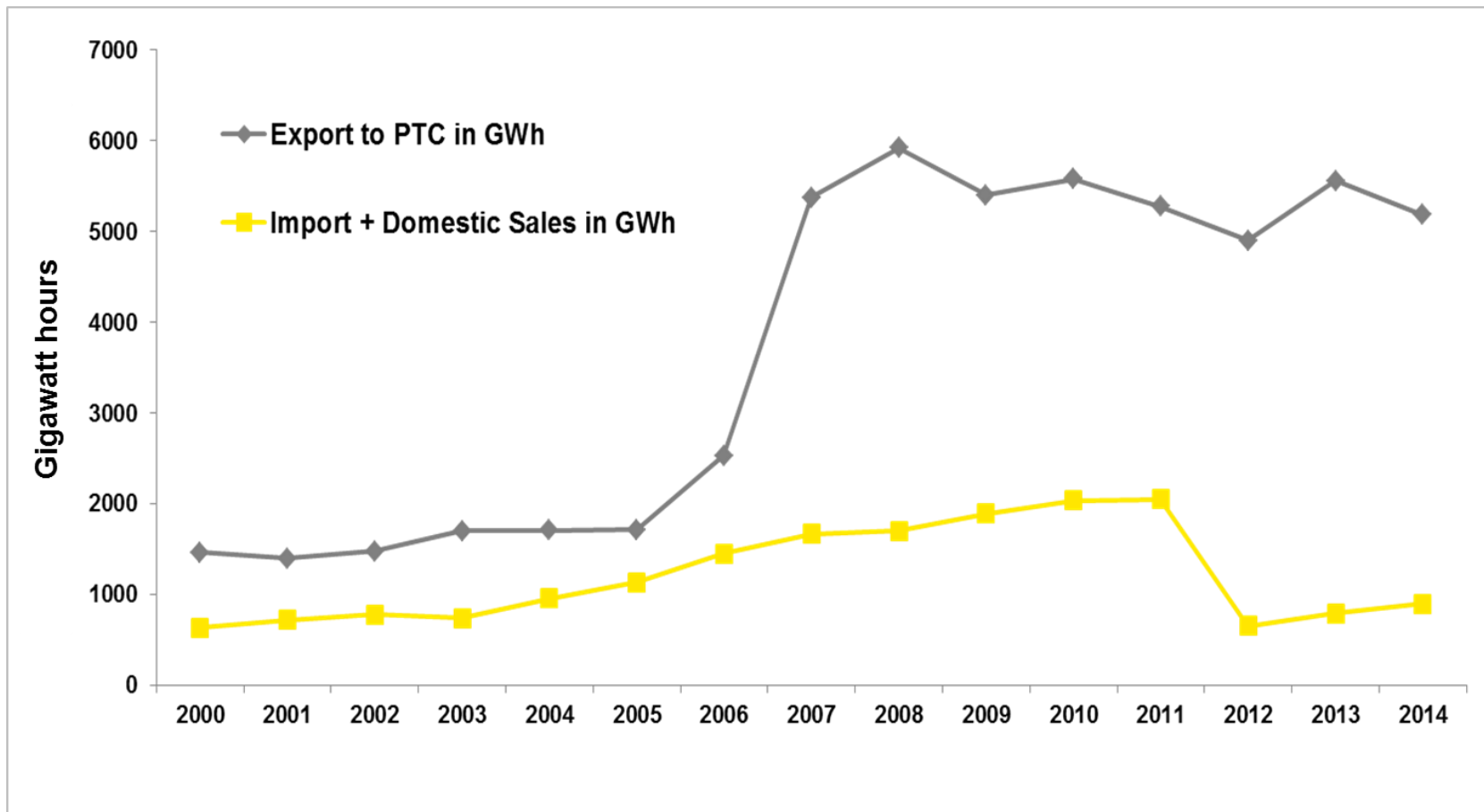


Sources/Supply of Energy

Annual Electricity Generation (GWh)

Details	2008	2009	2010	2011	2012	2013	2014	2015
Electricity generation	7,161.7	6,918.8	7,330.2	7,066.5	6,827.0	7,551.1	7,166.3	7,005.2
Chhukha hydro power	1,802	1,808	1,870	1,774	1,745	1,907	1,798	1,667
Kurichhu hydro power	386	370	378	362	361	379	368	335
Basochhu - hydro power (U/S) and (L/S) combined	336	323	330	322	300	332	306	270
Dagachhu hydro power	-	-	-	-	-	-	-	305
Tala hydro power	4,610	4,396	4,726	4,588	4,405	4,914	4675	4409
Other hydro power	24.8	21.0	25.6	20.0	15.2	18.5	18.5	18.5
All diesel generators	1.8	0.2	0.3	0.3	0.2	0.5	0.5	0.5

Export and Import of Electricity (in GWh)



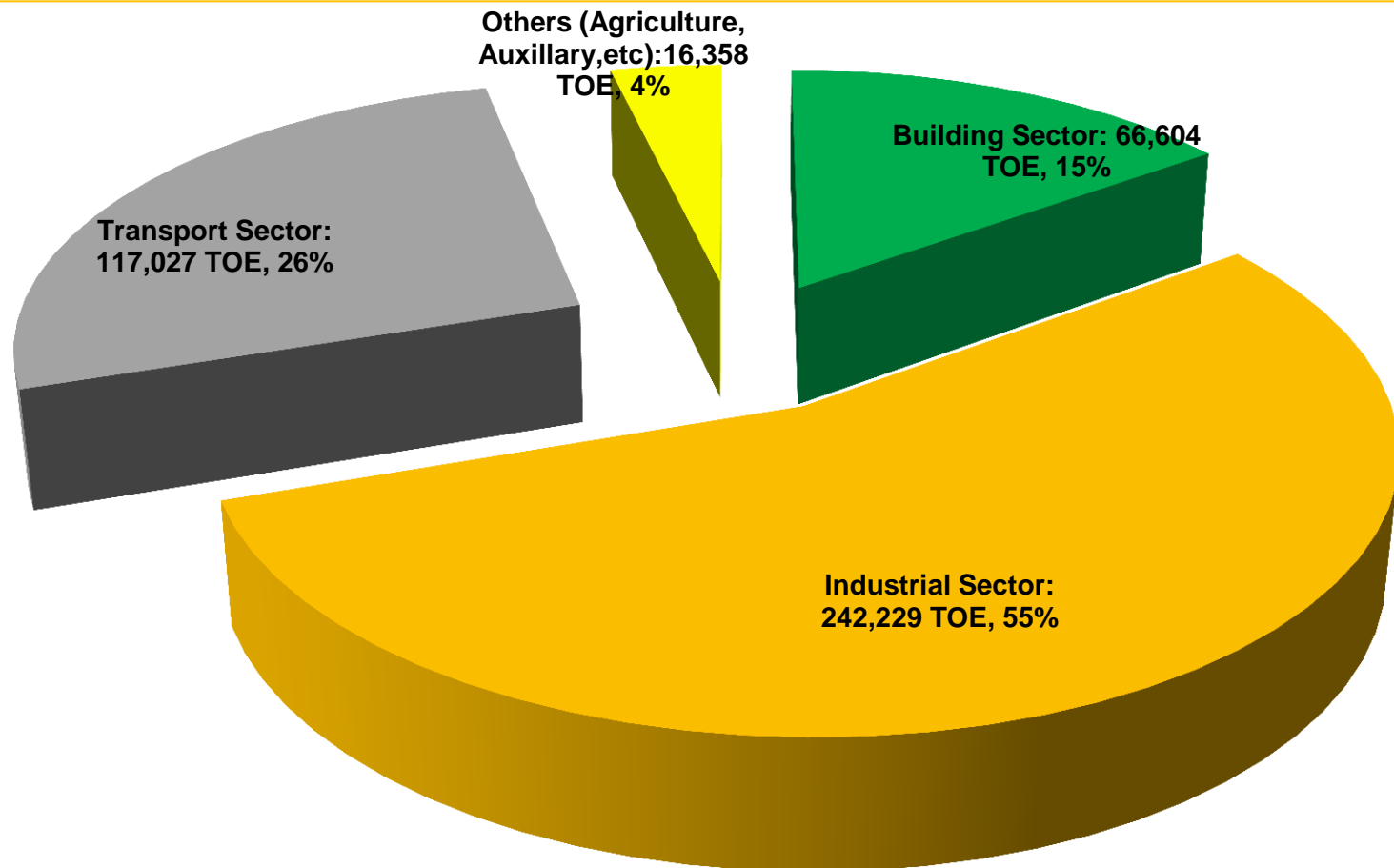
Major Petroleum Imports from 2006 to 2014

Product	Diesel		Petrol		Industrial)SKO(SKO (Quota)		LPG (MT)		Lubes / Greases		ATF		Total Value in Nu.
	kl	Million Nu	kl	Million Nu	kl	Million Nu	kl	Million Nu	MT	Million Nu	kl	Million Nu	kl	Million Nu	
2006	50654	1405	15216	570	9	0.4	14370	115.8	4980.4	90.1	751.3	70.6	801	27.6	2,279.50
2007	55477	1496.3	16781	603.2	105	3.3	10102	81.4	5405.5	98.2	944.2	94.9	1080	36.9	2,414.20
2008	57245	1654.8	17393	604.4	66	2.7	5186	41.6	5724.7	124.5	771.8	89.8	828	38.3	2,556.10
2009	64300	1792.9	19709	694.7	120	3.6	5307	42.8	5856.8	116.8	840.7	118.7	1008	32.4	2,801.90
2010	85620	3250.6	23422.5	951.2	240	8	5540	52.6	6834.2	138.2	587.9	73.1	1332	50.1	4,523.80
2011	103610.9	3562.8	26761.1	1364.2	120	5.7	5607	67	7410.9	190.1	708.7	105.2	1455	74.1	5,369.10
2012	121832	3207.3	29094	1626.8	0	0	5547	72.7	7469.2	151.7	574.7	100.6	2070	121.7	5,280.80
2013	122424.8	5471.9	30195.2	1746.2	12	0.7	4978	64.9	6778	177.1	574.5	79.6	3168	197.1	7,737.50
2014	117273.8	5911.4	31289.2	1819.9	21	1.2	5673	74.6	7029.9	183	555.5	89.3	3546	217.6	8,297.00
Total Imports from 2006 to 2014	778437.5	27753	209861	9980.6	693	25.5	62310	613.3	57489.6	1269.5	6309.4	821.8	15288	795.8	41,259.50

Export and Import Statistics of Coal for 2014

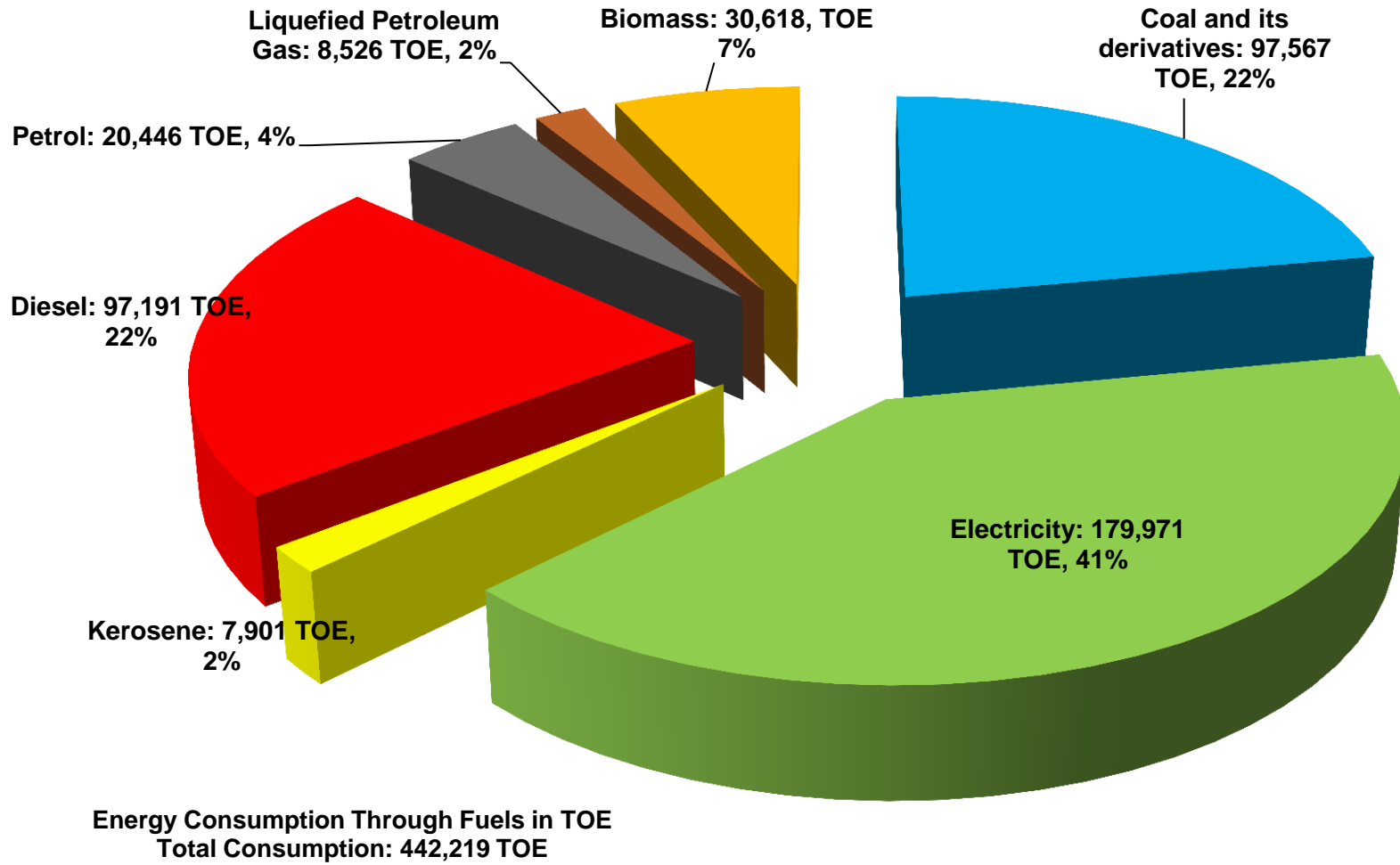
Coal and Derivatives				
	Anthracite	Sub-Bituminous	Other Coal	Coke/Semi-coke of Coal
	Tonnes	Tonnes	Tonnes	Tonnes
Production	0.0	1,21,891.0	0.0	0.0
Import	1,876.0	1.6	96,640.1	43,502.6
Export	0.0	23,537.7	6,449.3	2,365.9
Domestic Usage	1,876.0	98,354.8	90,190.8	41,136.7

Energy Demand/Consumption pattern in 2014 in different sectors

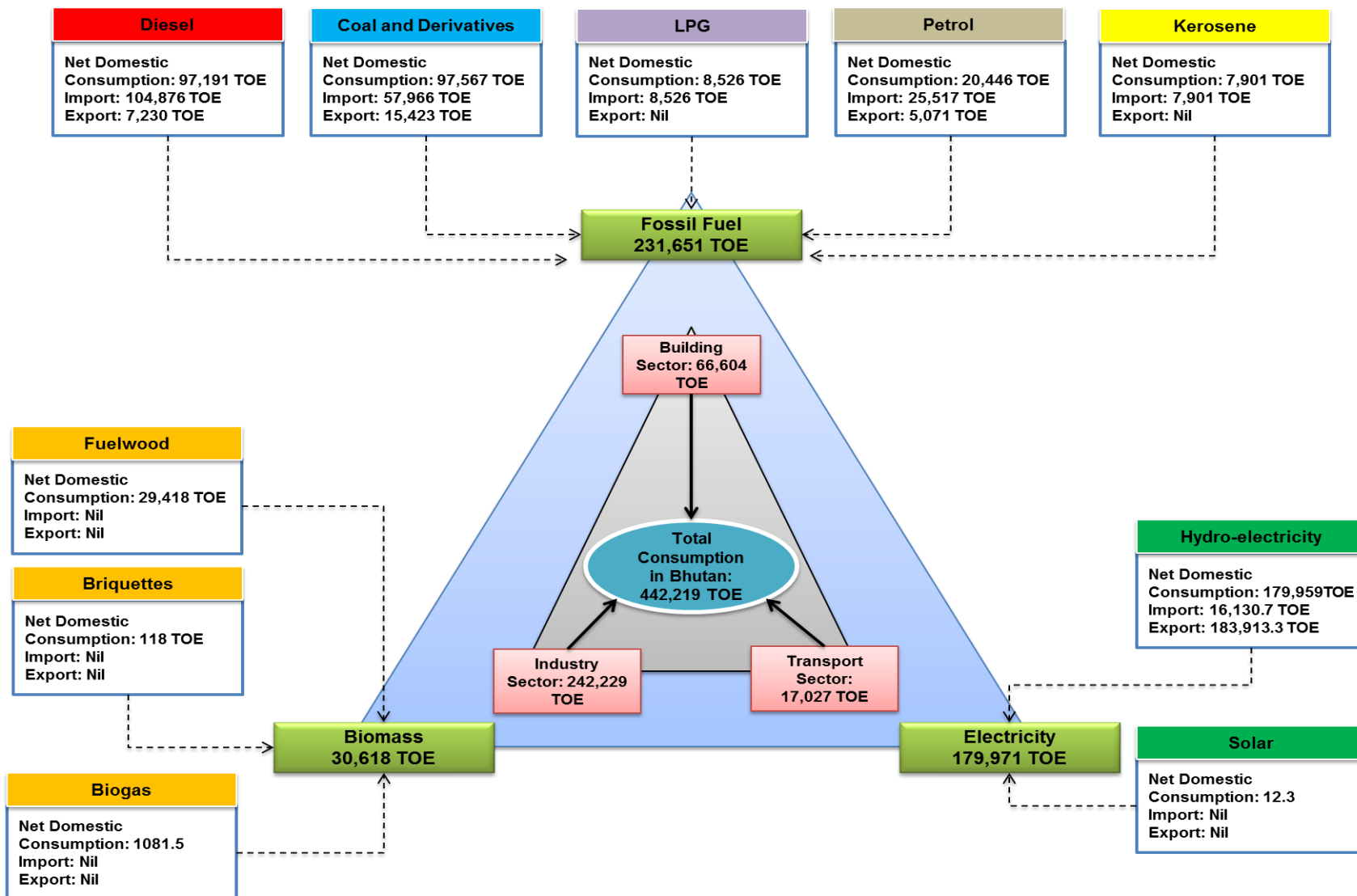


Sectoral Energy Consumption Split in TOE
Total Consumption: 442,219 TOE

Fuel Mix in the Economy:



Energy Balance and Fuel Mix



Initiatives & Challenges

- Started compiling Fossil Fuel and Electricity Supply and Use Table as part of our efforts to compiling Environmental Accounts
- Plan to start producing Energy Balance Statistics

Challenges

- Lack of qualified manpower
- Need systematic data collection mechanism
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Thank You