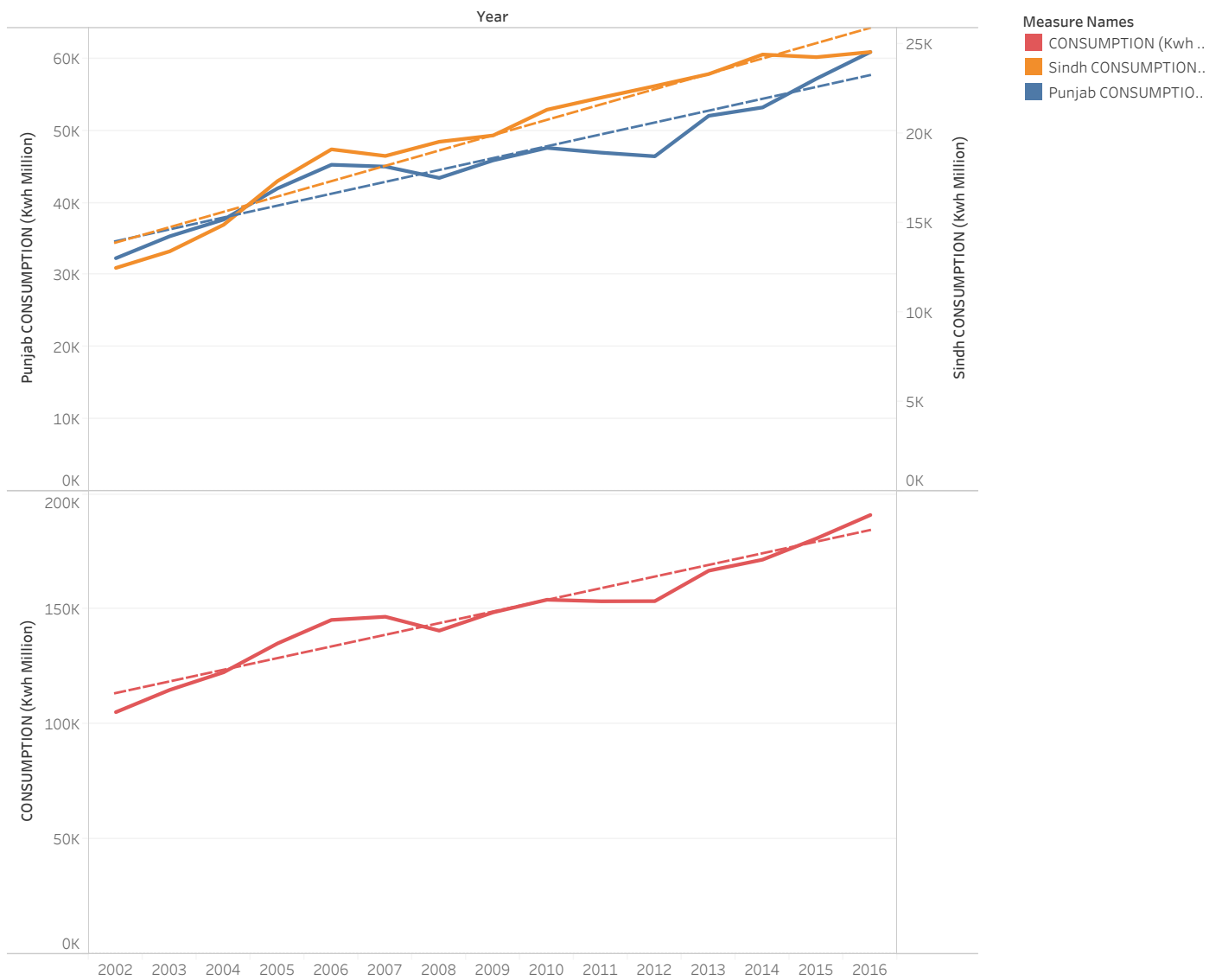


Pakistan Gas and Electricity Story

Overall there is a rising trend in consumption of electricity in Pakistan and across its province over the years from 2002-2016. The trend line forecasts that consumption will only rise. The p-value is <0.05 for all 3 trend lines.

The graphs shows that punjab province has a significant higher usage of electricity than its counterpart province sindh. In 2016, the difference in consumption is more than double. There is a significant increase from 2012-20..

Rising trends can be s..

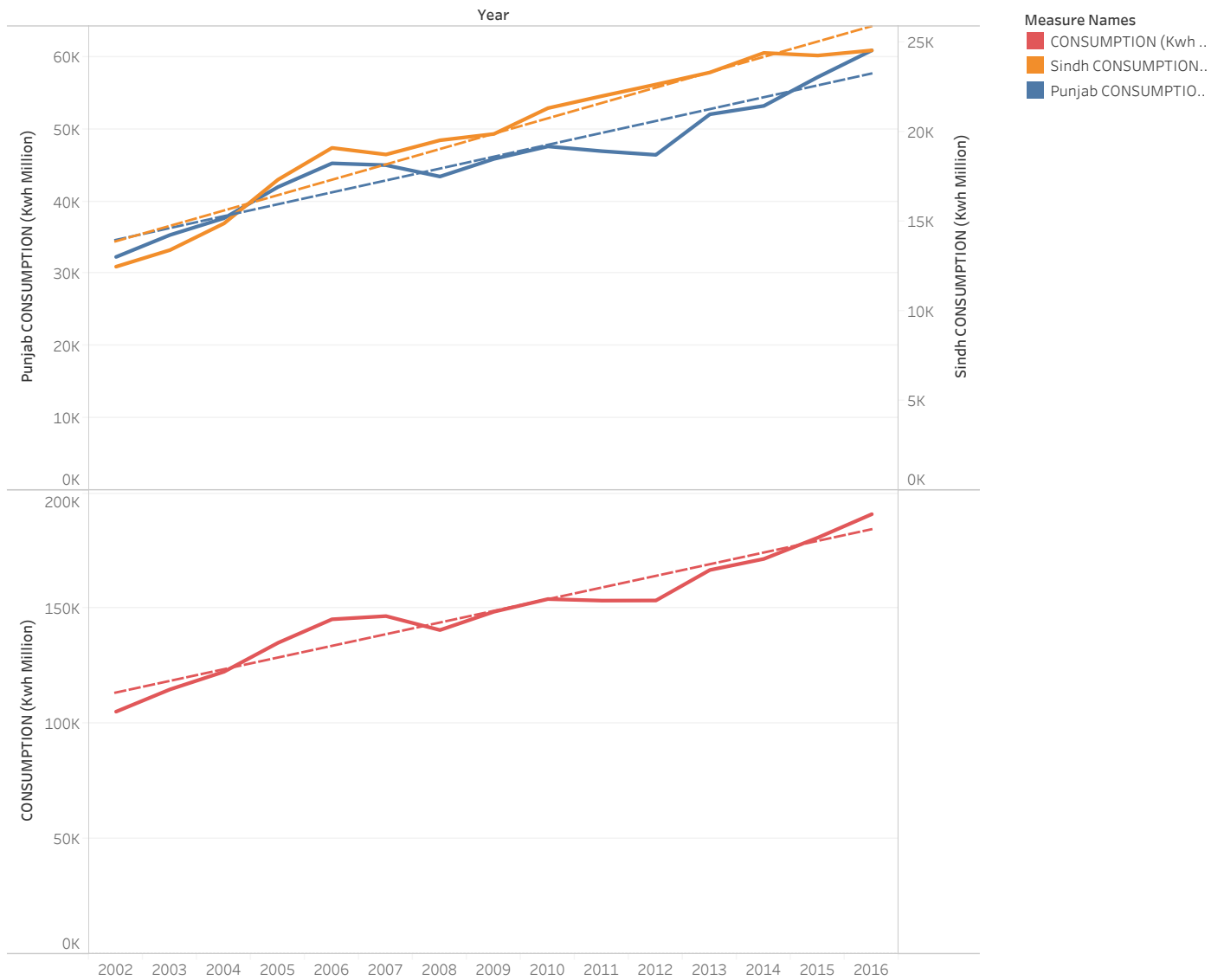


Pakistan Gas and Electricity Story

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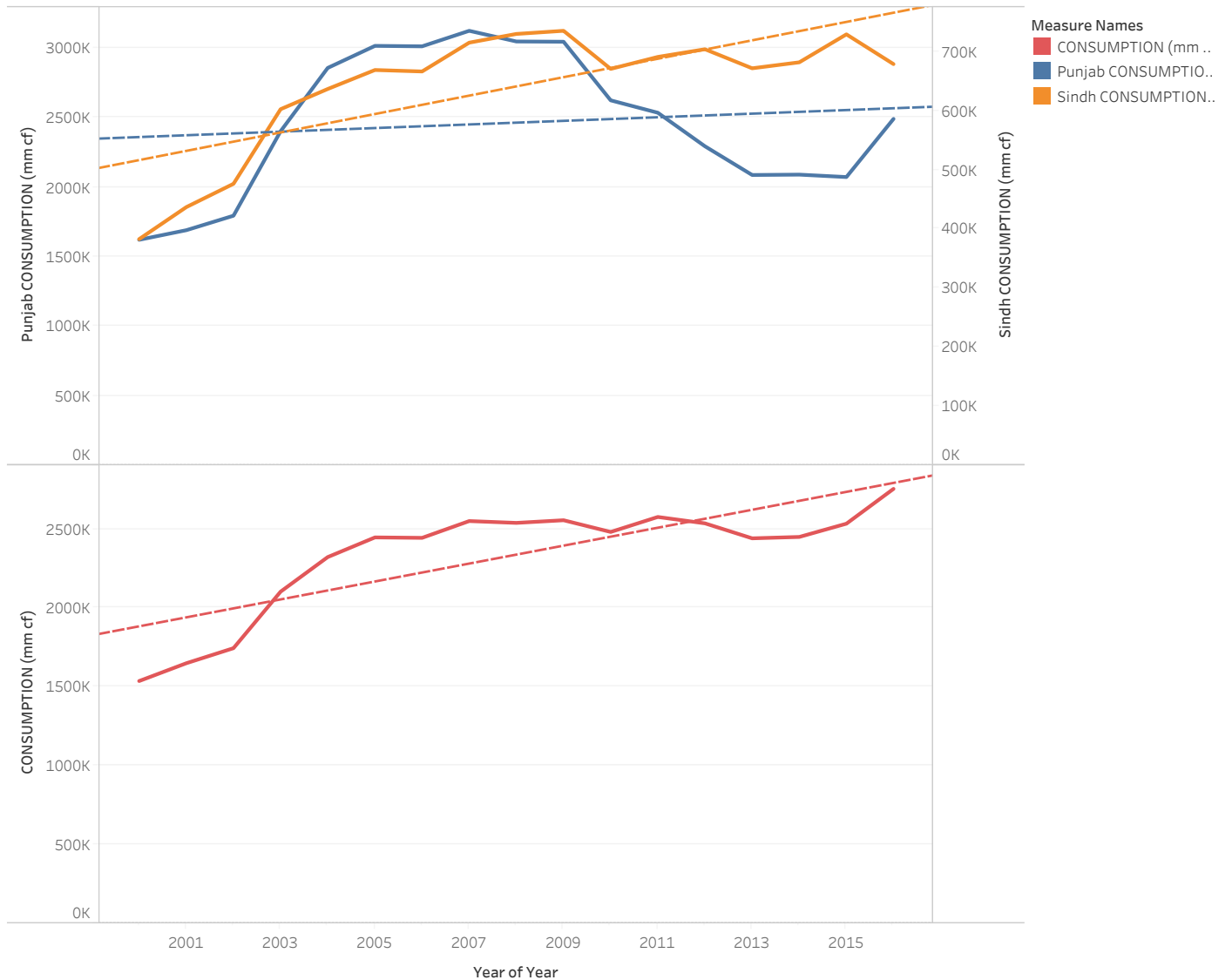


Pakistan Gas and Electricity Story

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The total consumption of gas in Punjab single-handedly outperforms total consumption of gas in Pakistan and evidently..



Pakistan Gas and Electricity Story

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The total consumption of gas in Punjab single-handedly outperforms total consumption of gas in Pakistan and evidently strengthens the claim that the Punjab data is not pure.

The leading consumers of electricity are Household,Industrial,and Agriculture. Which could mean government might incentivise ind..

Total Gas Consumption Card

Total Electricity Consumption Card

Punjab Gas Consumption Total

44,696,572

Sindh Gas Consumption Total

11,565,312

Pakistan Gas Consumption Total

39,663,393

Punjab Electricity Total

1,383,456 Kwh Million

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595,980 Kwh Million

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2,231,415 Kwh Million

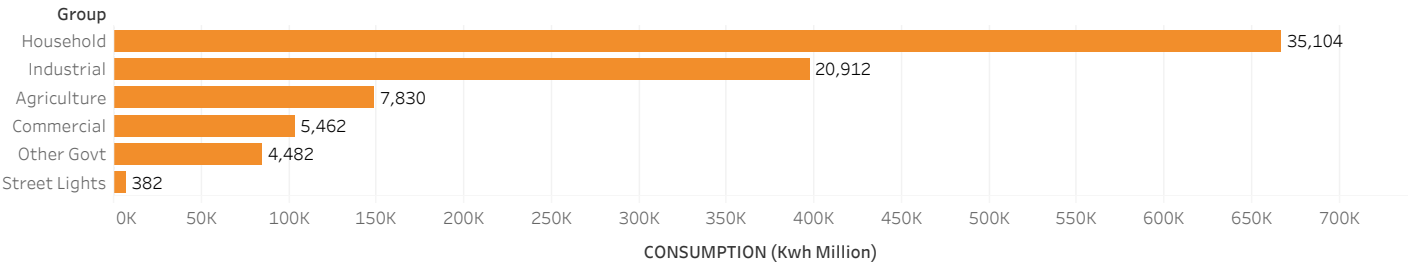
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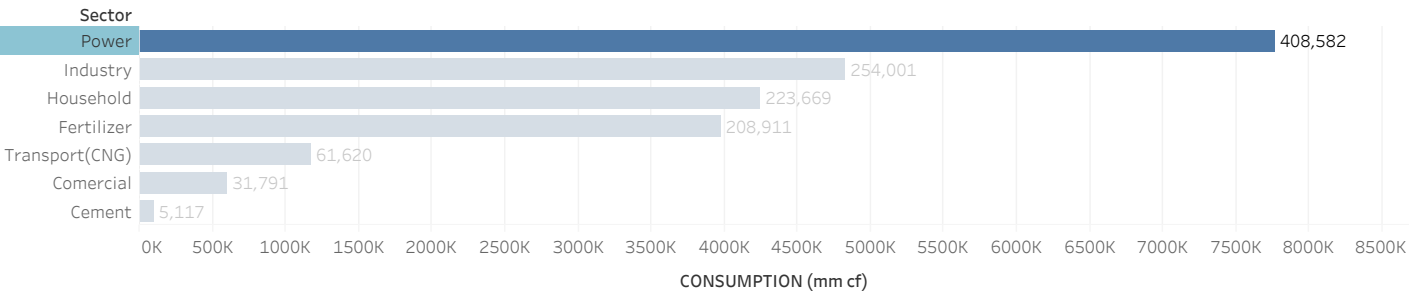
The leading consumers of electricity are Household,Industrial,and Agriculture. Which could mean government might incentivise industrial and agriculture sector to lower costs and promote growth and increase taxes on household to ..

The leading consumers of gas sectors are Power,Industry and Household. The power sector outperforms all other sectors by a sig..

All-time Top 3 Electricity sectors



All-Time Top 3 Gas sectors



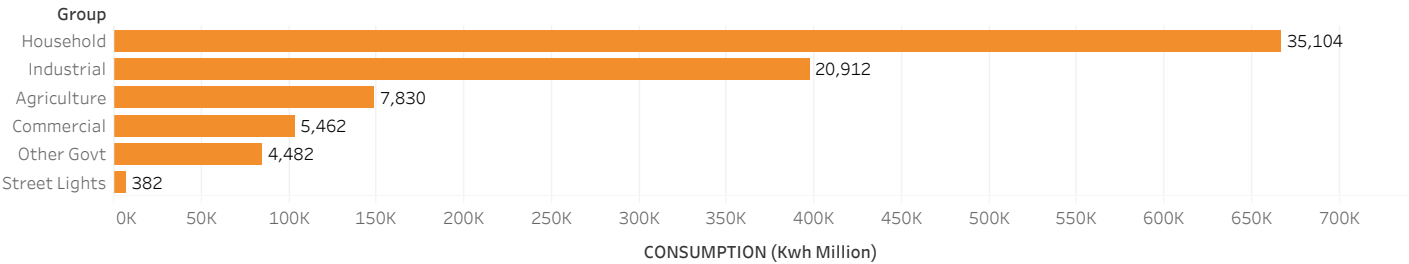
Pakistan Gas and Electricity Story

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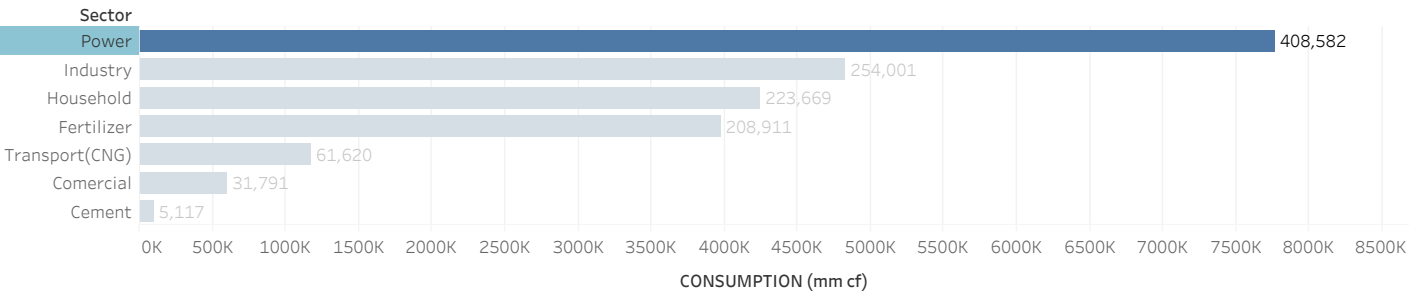
The leading consumers of gas sectors are Power, Industry and Household. The power sector outperforms all other sectors by a significant difference. The rising trend seen previously only indicates that the consumption will further i..

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All-time Top 3 Electricity sectors



All-Time Top 3 Gas sectors



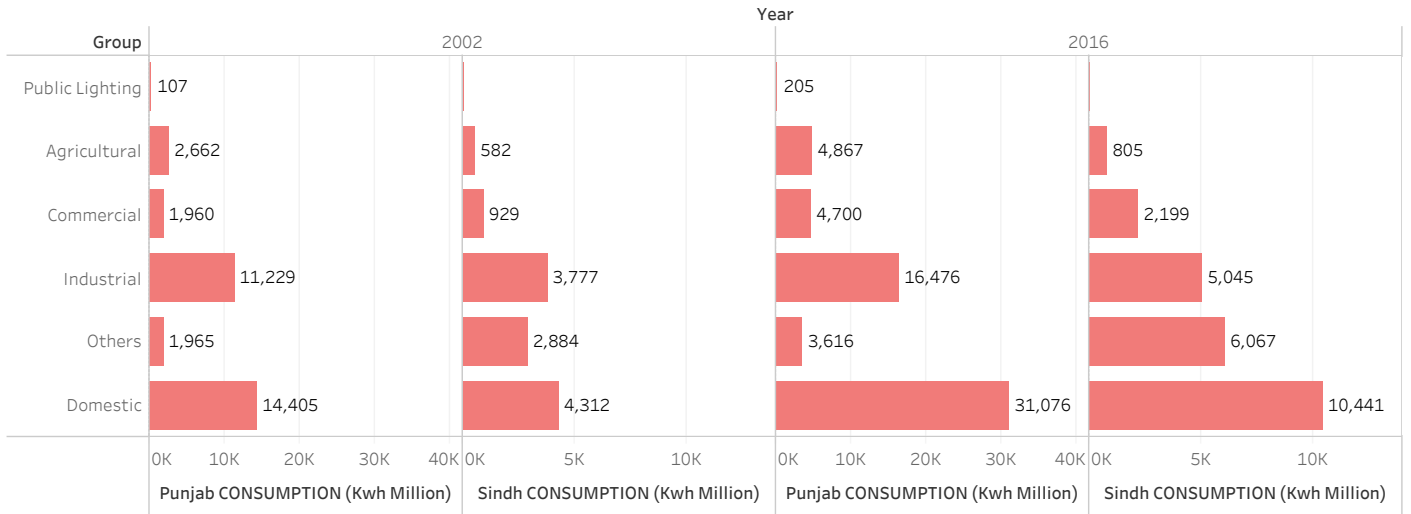
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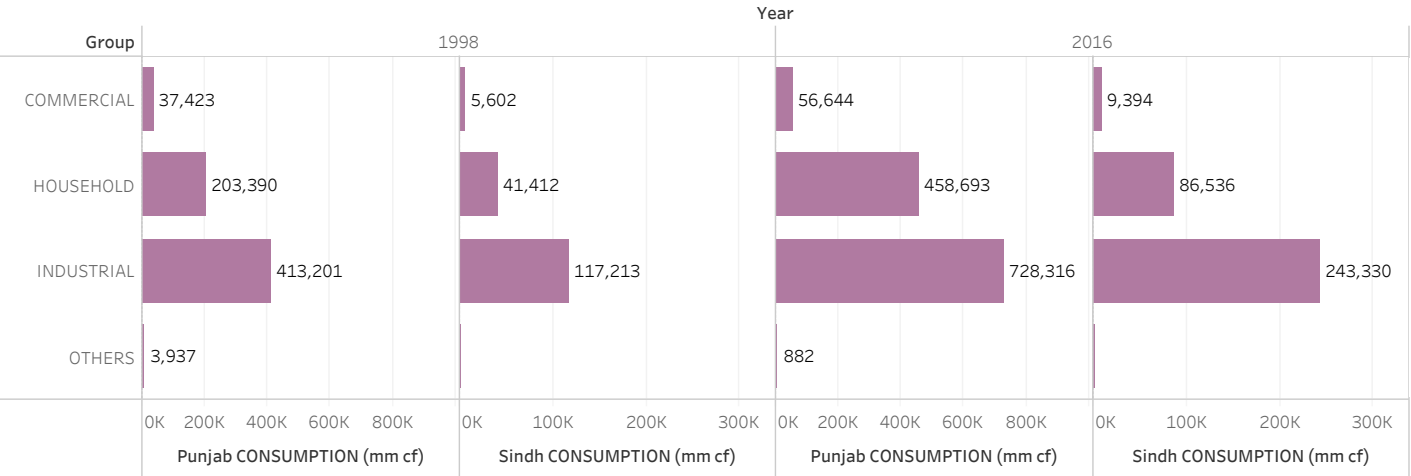
The consumption by sectors comparison of two years clearly shows that the reason for a significant increase in consumption of gas in industrial sector is largely due to the change in consumption of Punjab's gas industrial sector (all..

We can see the annual compound growth % with respect to base year 2000 and can compare the growth of consumption of each ..

Electricity Sector Consumption by Province over 15 Years



Gas Sector Consumption by Province over 19 Years



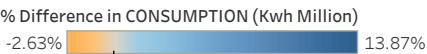
Pakistan Gas and Electricity Story

The consumption by sectors comparison of two years clearly shows that the reason for a significant increase in consumption of g..

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We can see that cement sector poorly performs as compared to transport sector (in terms of growth). Surely transport sector do..

%Compound Growth Over Years in Electricity Consumption in Pakistan



Year of Year	Agriculture	Commercial	Household	Industrial	Other Govt	Street Lights
2000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	13.87%	6.38%	1.95%	5.52%	-1.61%	-0.47%
2002	10.53%	7.71%	1.87%	6.19%	-2.63%	7.03%
2003	10.64%	9.97%	4.32%	6.57%	0.96%	7.15%
2004	9.15%	10.13%	4.93%	6.69%	1.40%	9.39%
2005	10.05%	11.26%	6.18%	6.66%	2.61%	10.63%
2006	8.82%	11.61%	6.56%	6.61%	3.55%	10.46%
2007	8.06%	10.48%	5.77%	5.40%	3.46%	10.00%
2008	7.52%	8.31%	4.46%	3.79%	2.37%	9.18%
2009	7.81%	8.13%	4.65%	3.66%	2.68%	8.88%
2010	6.18%	7.62%	4.66%	3.98%	3.06%	7.91%
2011	5.14%	6.86%	4.15%	3.88%	2.37%	7.63%
2012	3.79%	6.65%	3.92%	3.75%	1.42%	6.57%
2013	4.09%	6.61%	4.34%	4.15%	1.64%	6.07%
2014	3.56%	6.29%	4.37%	4.04%	1.56%	5.34%
2015	3.73%	6.55%	4.57%	3.78%	1.96%	5.25%
2016	4.00%	6.72%	4.87%	3.27%	2.49%	5.26%
2017	4.33%	6.89%	5.22%	3.89%	3.36%	4.83%
2018	1.17%	4.82%	3.71%	2.85%	3.91%	1.53%

Pakistan Gas and Electricity Story

The consumption by sector..

We can see the annual compound growth % with respect to base year 2000 and can compare the growth of consumption of each sector more clearly. This table clearly distinguishes between different sectors. The other govt sector performs..

We can see that cement sector poorly performs as compared to transport sector (in terms of growth). Surely transport sector doesn't consume as much gas as industry and power (relatively growth is compared) hence we observe s..

%Compound Growth Over Years in Gas Consumption in Pakistan

% Difference in CONSUM..

-29.73%66.61%

Year of YEAR	Sector						
	Cement	Comercial	Fertilizer	Household	Industry	Power	Transport(CNG)
2000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	1.23%	7.33%	1.25%	2.33%	9.32%	11.95%	66.61%
2002	-29.73%	5.10%	1.48%	4.38%	9.14%	9.24%	59.98%
2003	3.39%	5.47%	1.86%	3.27%	11.77%	18.65%	53.05%
2004	17.69%	7.16%	2.07%	5.13%	13.04%	15.89%	53.32%
2005	17.06%	7.26%	2.47%	3.96%	15.02%	11.82%	54.46%
2006	13.21%	7.25%	1.67%	4.69%	14.16%	7.48%	52.87%
2007	8.98%	7.36%	1.90%	5.43%	12.84%	6.25%	48.97%
2008	0.58%	7.04%	1.72%	5.37%	10.99%	4.64%	45.38%
2009	-13.24%	6.70%	2.56%	5.04%	10.26%	3.00%	41.25%
2010	-14.97%	5.87%	2.68%	5.12%	7.73%	1.84%	38.28%
2011	-14.37%	6.12%	1.73%	5.80%	7.15%	2.23%	34.89%
2012	-18.65%	5.83%	0.58%	6.26%	6.18%	2.13%	29.70%
2013	-18.08%	4.84%	1.63%	5.10%	4.93%	1.69%	25.82%
2014	-14.10%	3.89%	1.81%	4.98%	4.23%	2.01%	21.36%
2015	-16.15%	3.32%	2.07%	4.46%	3.70%	2.71%	19.51%
2016	-14.37%	2.96%	2.89%	4.63%	4.06%	2.94%	18.54%
2017	-13.52%	2.57%	1.43%	4.22%	4.12%	3.78%	17.65%
2018	-14.95%	2.43%	1.70%	4.48%	3.02%	3.83%	16.10%

Total Electricity Consumption Card

Punjab Electricity Total
1,383,456 Kwh Million
Sindh Electricity Total
595,980 Kwh Million
Pakistan Electricity Total
2,231,415 Kwh Million

Sum of Punjab CONSUMPTION (Kwh Million), sum of Sindh CONSUMPTION (Kwh Million) and sum of CONSUMPTION (Kwh Million) (elec (Pak Elec Analysis)).

Total Electricity Consumption Card

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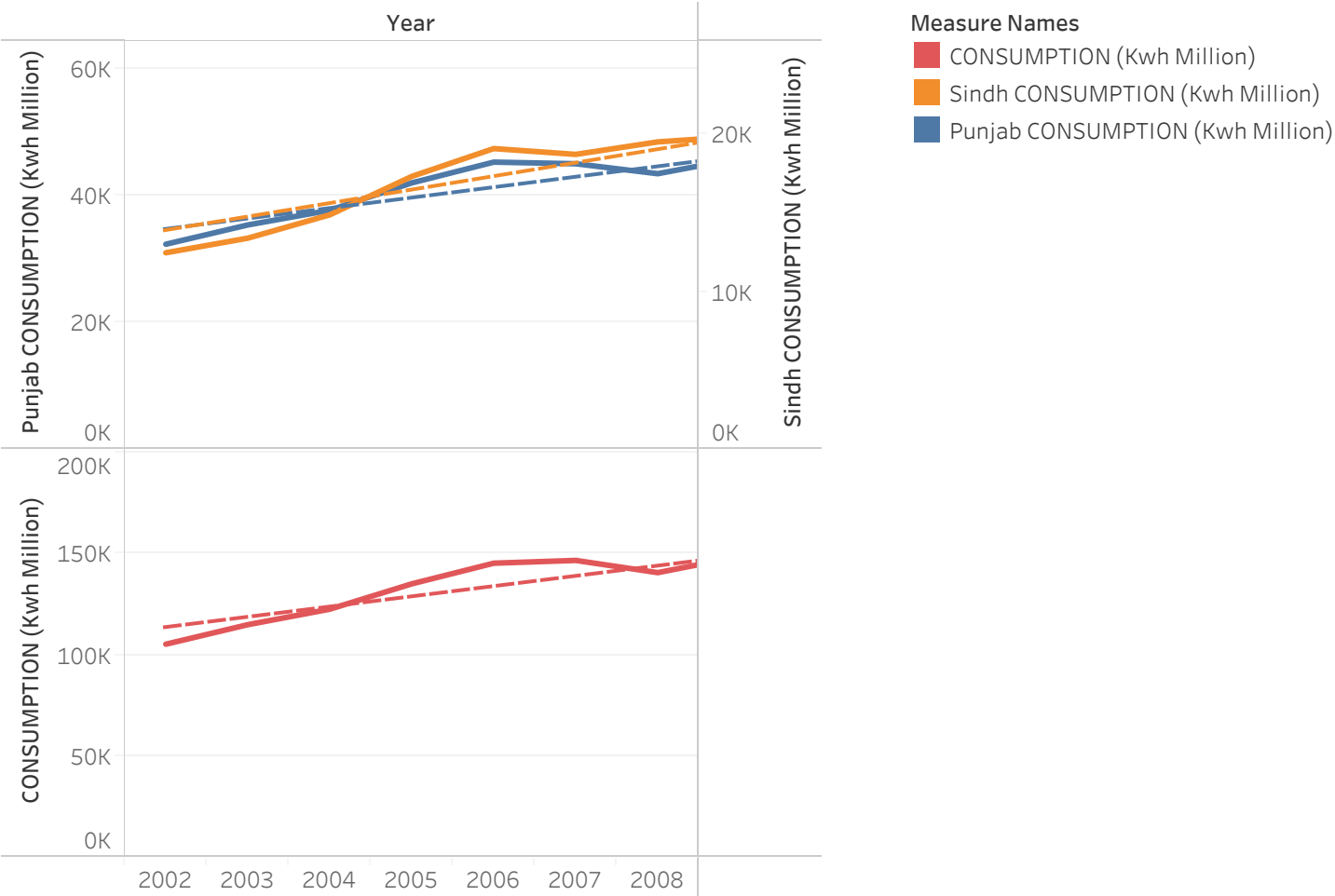
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Sum of Punjab CONSUMPTION (mm cf), sum of Sindh CONSUMPTION (mm cf) and sum of CONSUMPTION (mm cf) (Gas (Pak Gas Analysis)).

Total Gas Consumption Card

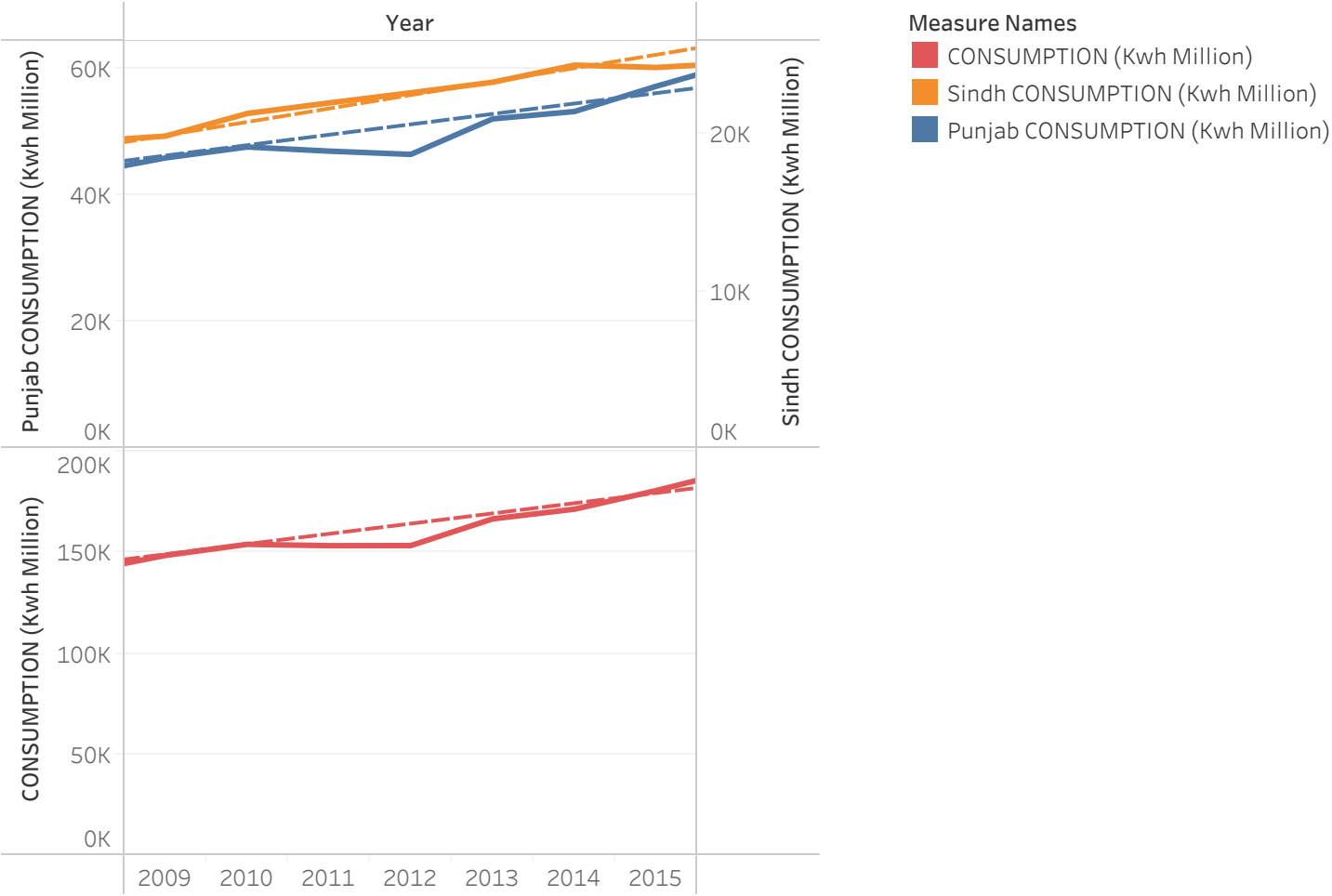
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Electricity Trend Across Province/Country



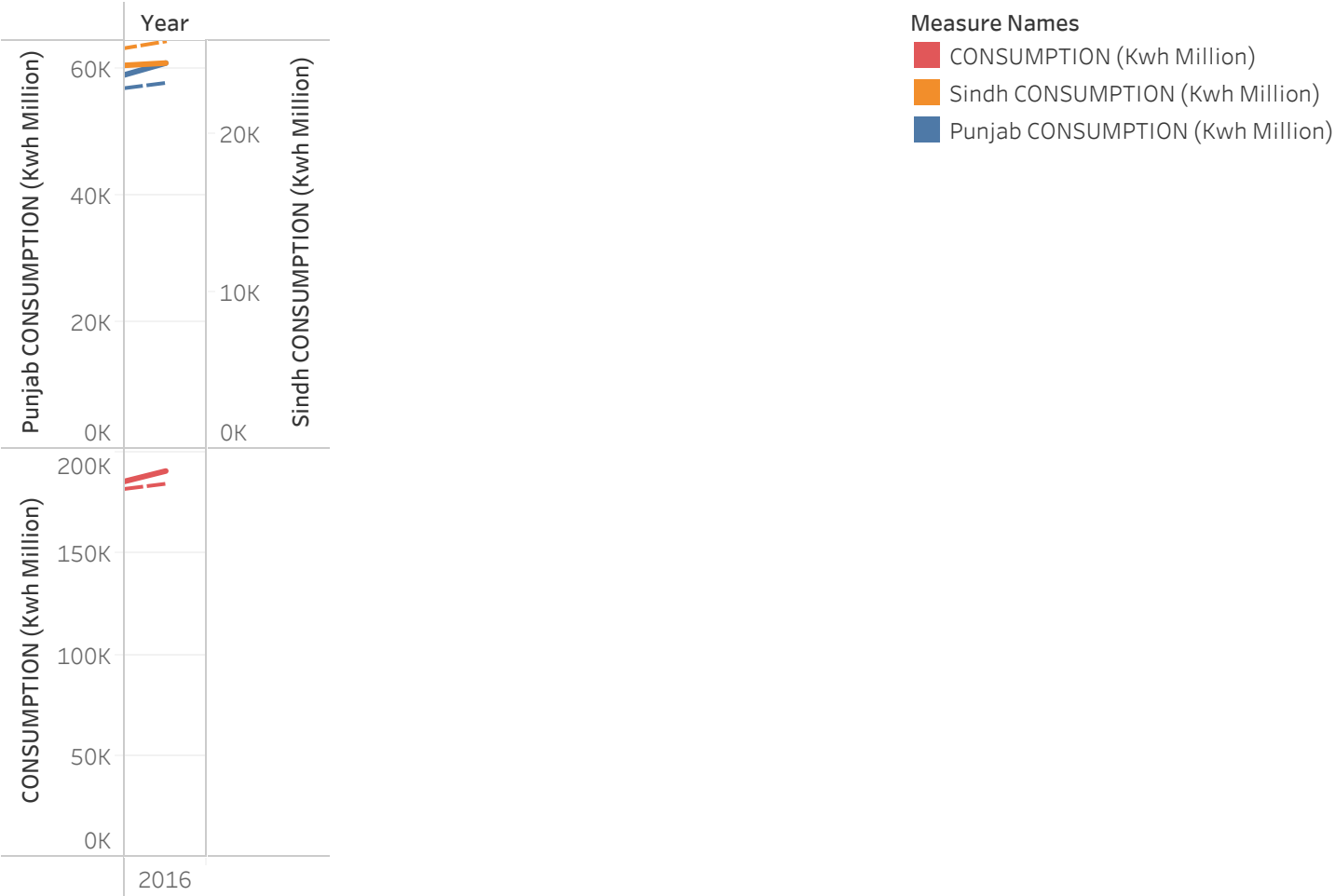
The trends of Punjab CONSUMPTION (Kwh Million), Sindh CONSUMPTION (Kwh Million) and CONSUMPTION (Kwh Million) for Year Year. Color shows details about Punjab CONSUMPTION (Kwh Million), Sindh CONSUMPTION (Kwh Million) and CONSUMPTION (Kwh Million). The data is filtered on Group, which excludes Total.

Electricity Trend Across Province/Country



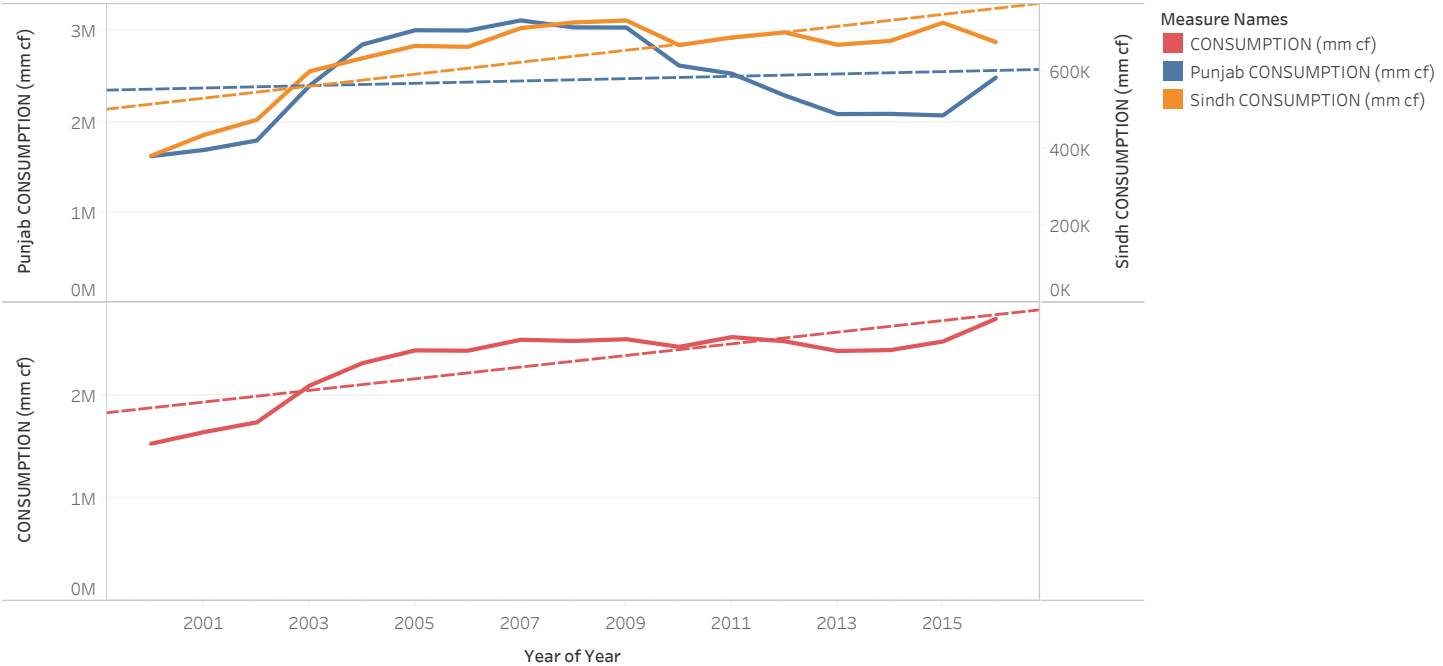
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Electricity Trend Across Province/Country



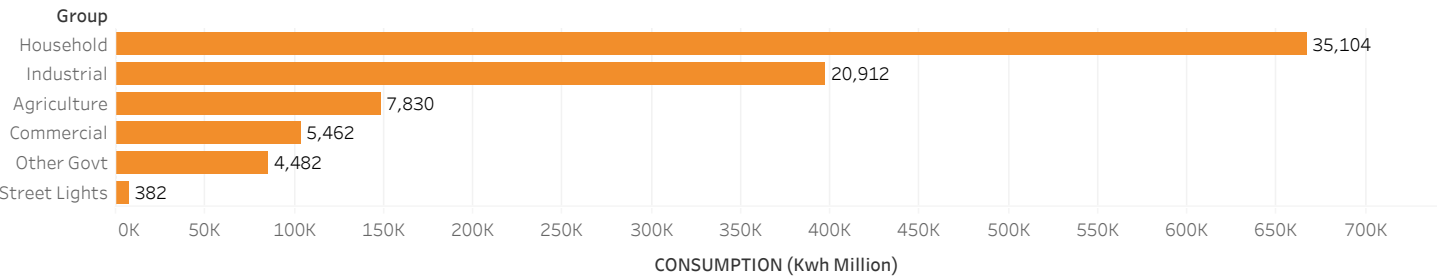
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Gas Trend Across Province/Pakistan



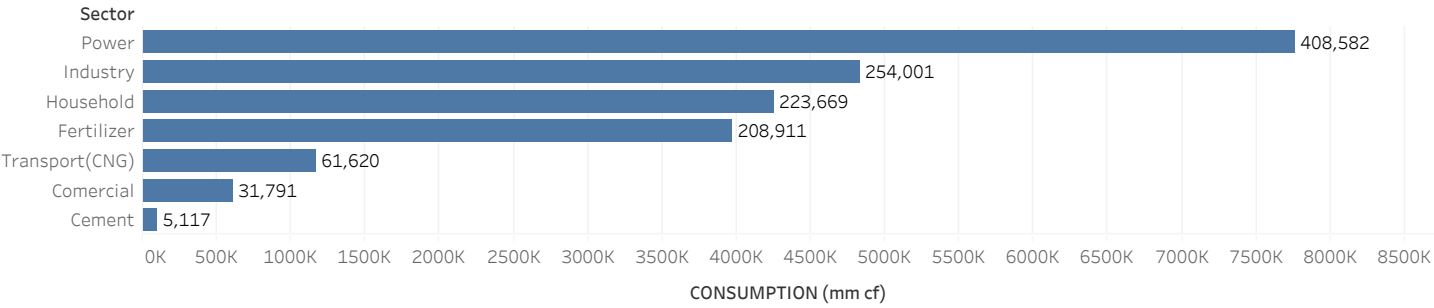
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All-time Top 3 Electricity sectors



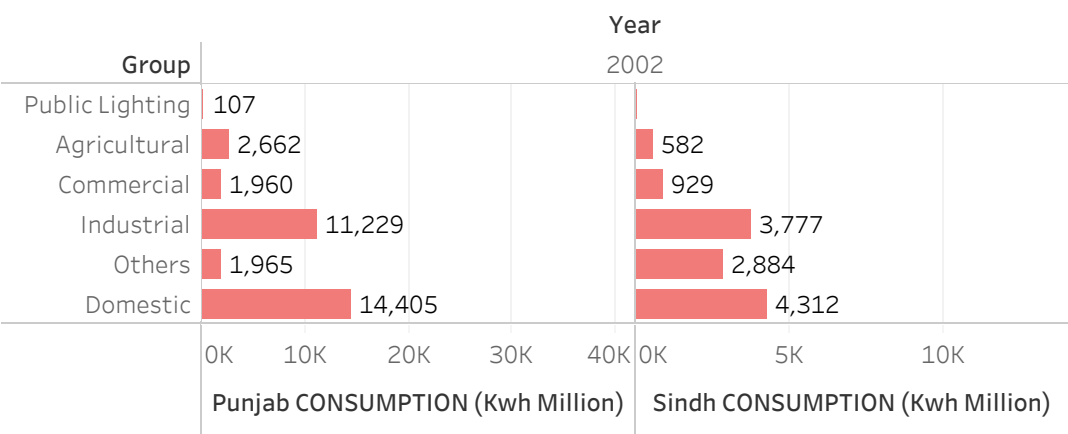
Sum of CONSUMPTION (Kwh Million) for each Group. The marks are labeled by average of CONSUMPTION (Kwh Million). The view is filtered on Group, which excludes TOTAL.

All-Time Top 3 Gas sectors



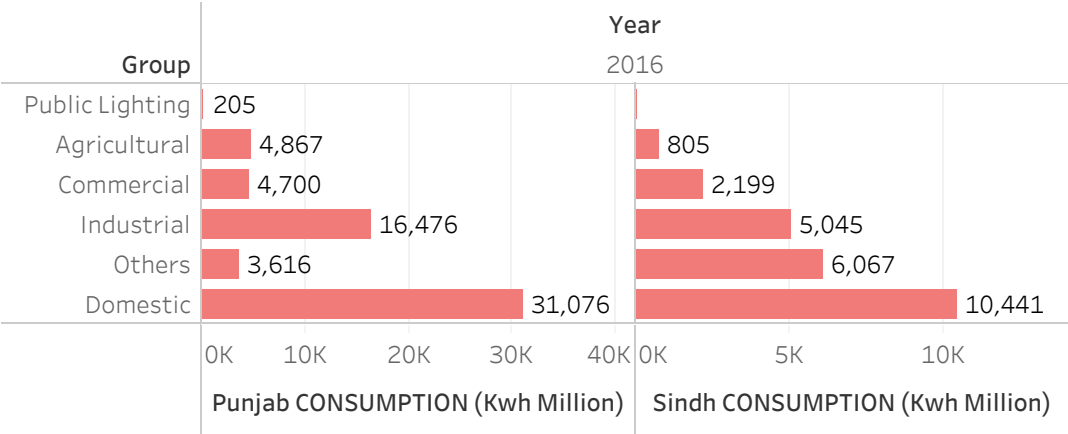
Sum of CONSUMPTION (mm cf) for each Sector. The marks are labeled by average of CONSUMPTION (mm cf). The view is filtered on Sector, which excludes Total.

Electricity Sector Consumption by Province over 15 Years



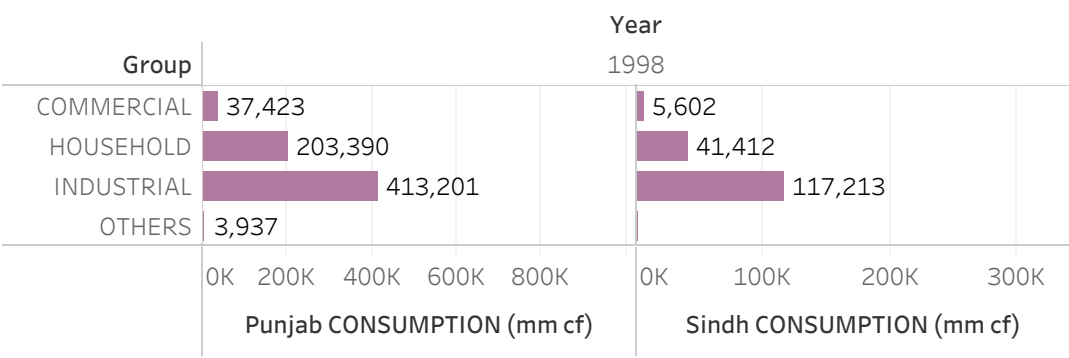
Sum of Punjab CONSUMPTION (Kwh Million) and sum of Sindh CONSUMPTION (Kwh Million) for each Group broken down by Year Year. For pane Sum of Punjab CONSUMPTION (Kwh Million): The marks are labeled by sum of Punjab CONSUMPTION (Kwh Million). For pane Sum of Sindh CONSUMPTION (Kwh Million): The marks are labeled by sum of Sindh CONSUMPTION (Kwh Million). The view is filtered on Group and Year Year. The Group filter excludes Total. The Year Year filter keeps 2002 and 2016.

Electricity Sector Consumption by Province over 15 Years



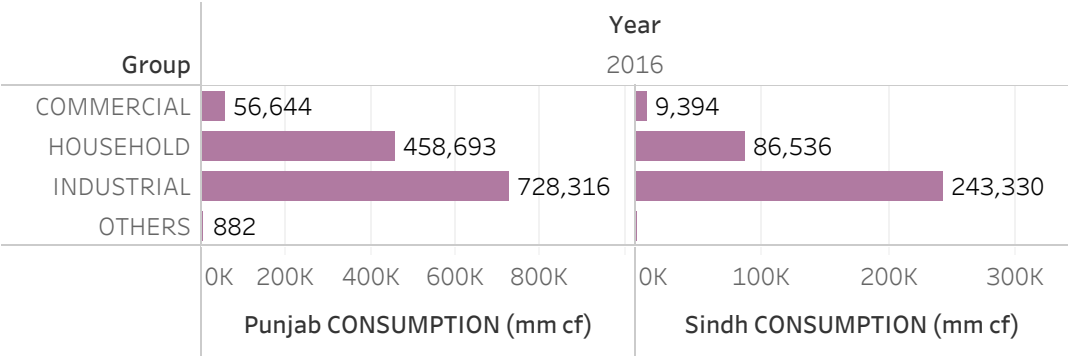
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Gas Sector Consumption by Province over 19 Years




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%Compound Growth Over Years in Electricity Consumption in Pakistan

Year of Year	Agriculture	Commercial	Household	Industrial	% Difference in CONSU..
2000	0.00%	0.00%	0.00%	0.00%	 -2.63%13.87%
2001	13.87%	6.38%	1.95%	5.52%	
2002	10.53%	7.71%	1.87%	6.19%	
2003	10.64%	9.97%	4.32%	6.57%	
2004	9.15%	10.13%	4.93%	6.69%	
2005	10.05%	11.26%	6.18%	6.66%	
2006	8.82%	11.61%	6.56%	6.61%	
2007	8.06%	10.48%	5.77%	5.40%	
2008	7.52%	8.31%	4.46%	3.79%	
2009	7.81%	8.13%	4.65%	3.66%	
2010	6.18%	7.62%	4.66%	3.98%	
2011	5.14%	6.86%	4.15%	3.88%	
2012	3.79%	6.65%	3.92%	3.75%	
2013	4.09%	6.61%	4.34%	4.15%	
2014	3.56%	6.29%	4.37%	4.04%	
2015	3.73%	6.55%	4.57%	3.78%	
2016	4.00%	6.72%	4.87%	3.27%	
2017	4.33%	6.89%	5.22%	3.89%	
2018	1.17%	4.82%	3.71%	2.85%	

% Difference in CONSUMPTION (Kwh Million) broken down by Group vs. Year Year. Color shows % Difference in CONSUMPTION (Kwh Million). The marks are labeled by % Difference in CONSUMPTION (Kwh Million). The view is filtered on Group, which excludes TOTAL.

%Compound Growth Over Years in Electricity Consumption in Pakistan

Year of Year	Other Govt	Street Lights
2000	0.00%	0.00%
2001	-1.61%	-0.47%
2002	-2.63%	7.03%
2003	0.96%	7.15%
2004	1.40%	9.39%
2005	2.61%	10.63%
2006	3.55%	10.46%
2007	3.46%	10.00%
2008	2.37%	9.18%
2009	2.68%	8.88%
2010	3.06%	7.91%
2011	2.37%	7.63%
2012	1.42%	6.57%
2013	1.64%	6.07%
2014	1.56%	5.34%
2015	1.96%	5.25%
2016	2.49%	5.26%
2017	3.36%	4.83%
2018	3.91%	1.53%

% Difference in CONSU..

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% Difference in CONSUMPTION (Kwh Million) broken down by Group vs. Year Year. Color shows % Difference in CONSUMPTION (Kwh Million). The marks are labeled by % Difference in CONSUMPTION (Kwh Million). The view is filtered on Group, which excludes TOTAL.

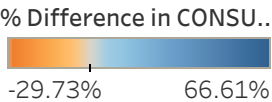
%Compound Growth Over Years in Gas Consumption in Pakistan

Year of YEAR	Sector					% Difference in CONSU..
	Cement	Comercial	Fertilizer	Household	Industry	
2000	0.00%	0.00%	0.00%	0.00%		<div> <div></div> <div>-29.73%</div> <div>66.61%</div> </div>
2001	1.23%	7.33%	1.25%	2.33%		
2002	-29.73%	5.10%	1.48%	4.38%		
2003	3.39%	5.47%	1.86%	3.27%	1	
2004	17.69%	7.16%	2.07%	5.13%	1	
2005	17.06%	7.26%	2.47%	3.96%	1	
2006	13.21%	7.25%	1.67%	4.69%	1	
2007	8.98%	7.36%	1.90%	5.43%	1	
2008	0.58%	7.04%	1.72%	5.37%	1	
2009	-13.24%	6.70%	2.56%	5.04%	1	
2010	-14.97%	5.87%	2.68%	5.12%		
2011	-14.37%	6.12%	1.73%	5.80%		
2012	-18.65%	5.83%	0.58%	6.26%		
2013	-18.08%	4.84%	1.63%	5.10%		
2014	-14.10%	3.89%	1.81%	4.98%		
2015	-16.15%	3.32%	2.07%	4.46%		
2016	-14.37%	2.96%	2.89%	4.63%		
2017	-13.52%	2.57%	1.43%	4.22%		
2018	-14.95%	2.43%	1.70%	4.48%		

% Difference in CONSUMPTION (mm cf) broken down by Sector vs. YEAR Year. Color shows % Difference in CONSUMPTION (mm cf). The marks are labeled by % Difference in CONSUMPTION (mm cf). The view is filtered on Sector, which excludes Total.

%Compound Growth Over Years in Gas Consumption in Pakistan

Year of YEAR	Sector		
	Industry	Power	Transport(CNG)
2000	0.00%	0.00%	0.00%
2001	9.32%	11.95%	66.61%
2002	9.14%	9.24%	59.98%
2003	1.77%	18.65%	53.05%
2004	3.04%	15.89%	53.32%
2005	5.02%	11.82%	54.46%
2006	4.16%	7.48%	52.87%
2007	2.84%	6.25%	48.97%
2008	0.99%	4.64%	45.38%
2009	0.26%	3.00%	41.25%
2010	7.73%	1.84%	38.28%
2011	7.15%	2.23%	34.89%
2012	6.18%	2.13%	29.70%
2013	4.93%	1.69%	25.82%
2014	4.23%	2.01%	21.36%
2015	3.70%	2.71%	19.51%
2016	4.06%	2.94%	18.54%
2017	4.12%	3.78%	17.65%
2018	3.02%	3.83%	16.10%



% Difference in CONSUMPTION (mm cf) broken down by Sector vs. YEAR Year. Color shows % Difference in CONSUMPTION (mm cf). The marks are labeled by % Difference in CONSUMPTION (mm cf). The view is filtered on Sector, which excludes Total.

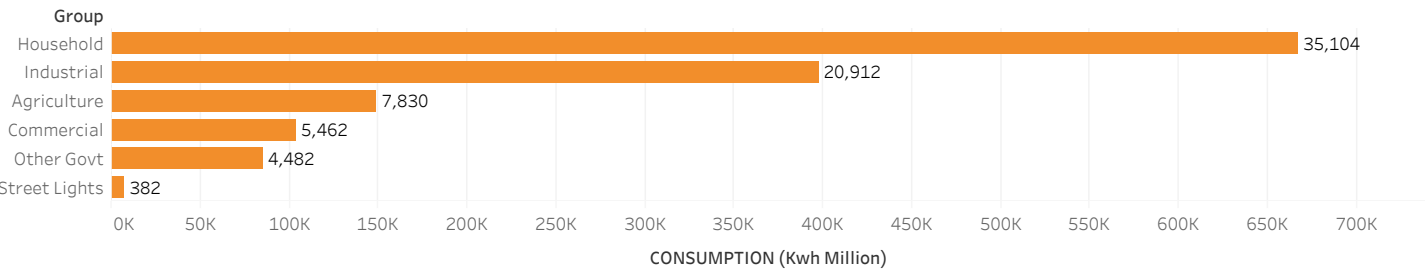
Total Gas Consumption Card

Punjab Gas Consumption Total
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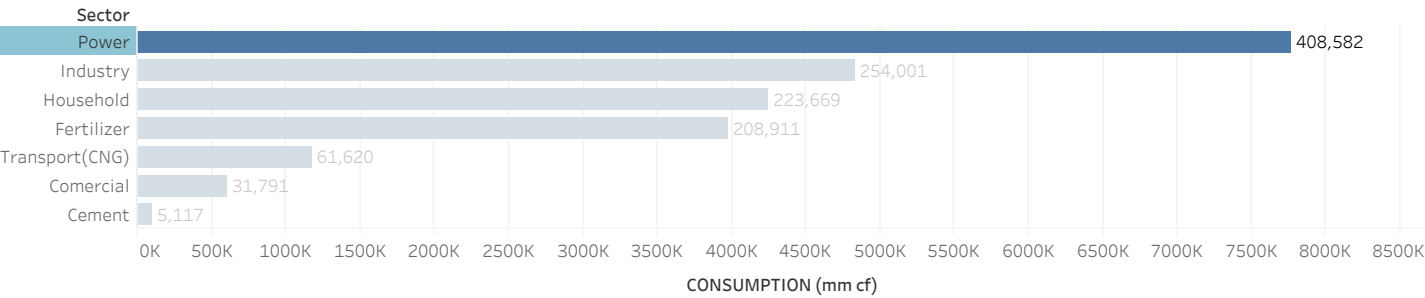
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Punjab Electricity Total
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Pakistan Electricity Total
2,231,415 Kwh Million

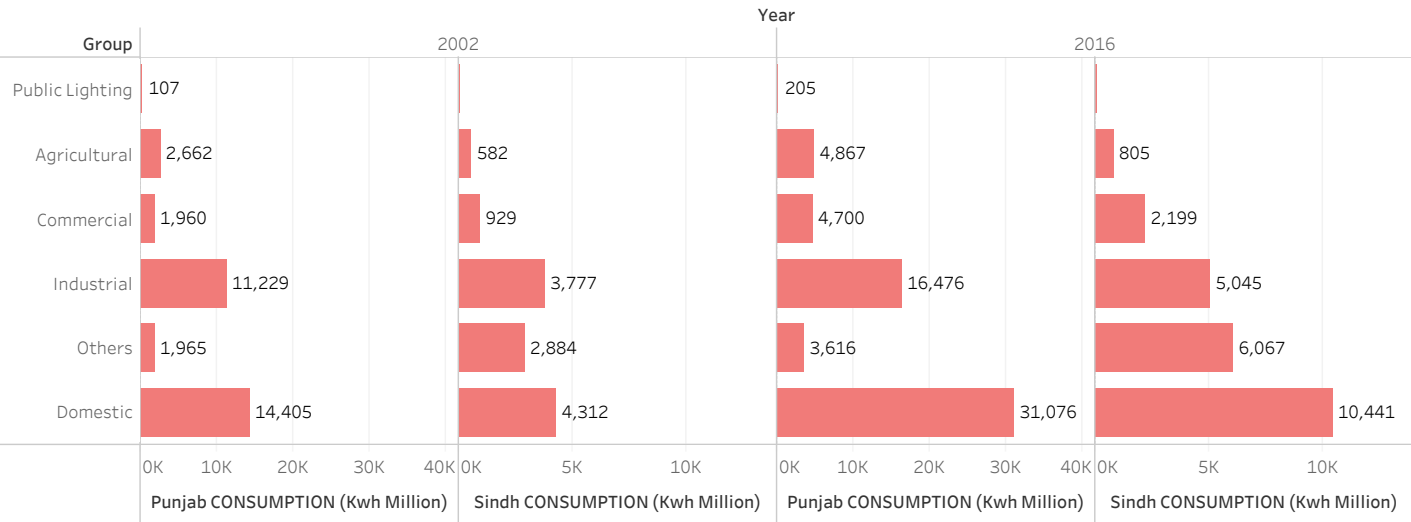
All-time Top 3 Electricity sectors



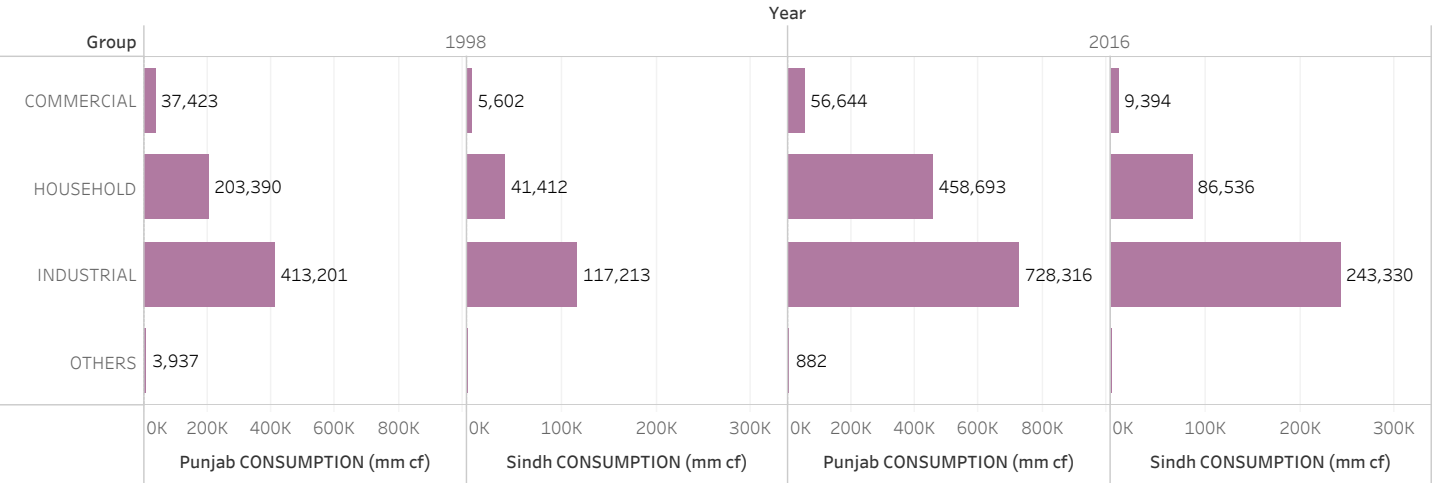
All-Time Top 3 Gas sectors



Electricity Sector Consumption by Province over 15 Years



Gas Sector Consumption by Province over 19 Years



%Compund Growth Over Years in Electricity Consumption in Pakistan



Year of Year	Agriculture	Commercial	Household	Industrial	Other Govt	Street Lights
2000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	13.87%	6.38%	1.95%	5.52%	-1.61%	-0.47%
2002	10.53%	7.71%	1.87%	6.19%	-2.63%	7.03%
2003	10.64%	9.97%	4.32%	6.57%	0.96%	7.15%
2004	9.15%	10.13%	4.93%	6.69%	1.40%	9.39%
2005	10.05%	11.26%	6.18%	6.66%	2.61%	10.63%
2006	8.82%	11.61%	6.56%	6.61%	3.55%	10.46%
2007	8.06%	10.48%	5.77%	5.40%	3.46%	10.00%
2008	7.52%	8.31%	4.46%	3.79%	2.37%	9.18%
2009	7.81%	8.13%	4.65%	3.66%	2.68%	8.88%
2010	6.18%	7.62%	4.66%	3.98%	3.06%	7.91%
2011	5.14%	6.86%	4.15%	3.88%	2.37%	7.63%
2012	3.79%	6.65%	3.92%	3.75%	1.42%	6.57%
2013	4.09%	6.61%	4.34%	4.15%	1.64%	6.07%
2014	3.56%	6.29%	4.37%	4.04%	1.56%	5.34%
2015	3.73%	6.55%	4.57%	3.78%	1.96%	5.25%
2016	4.00%	6.72%	4.87%	3.27%	2.49%	5.26%
2017	4.33%	6.89%	5.22%	3.89%	3.36%	4.83%
2018	1.17%	4.82%	3.71%	2.85%	3.91%	1.53%

%Compound Growth Over Years in Gas Consumption in Pakistan

% Difference in CONSUM..
-29.73% 66.61%

Year of YEAR	Sector						
	Cement	Comercial	Fertilizer	Household	Industry	Power	Transport(CNG)
2000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	1.23%	7.33%	1.25%	2.33%	9.32%	11.95%	66.61%
2002	-29.73%	5.10%	1.48%	4.38%	9.14%	9.24%	59.98%
2003	3.39%	5.47%	1.86%	3.27%	11.77%	18.65%	53.05%
2004	17.69%	7.16%	2.07%	5.13%	13.04%	15.89%	53.32%
2005	17.06%	7.26%	2.47%	3.96%	15.02%	11.82%	54.46%
2006	13.21%	7.25%	1.67%	4.69%	14.16%	7.48%	52.87%
2007	8.98%	7.36%	1.90%	5.43%	12.84%	6.25%	48.97%
2008	0.58%	7.04%	1.72%	5.37%	10.99%	4.64%	45.38%
2009	-13.24%	6.70%	2.56%	5.04%	10.26%	3.00%	41.25%
2010	-14.97%	5.87%	2.68%	5.12%	7.73%	1.84%	38.28%
2011	-14.37%	6.12%	1.73%	5.80%	7.15%	2.23%	34.89%
2012	-18.65%	5.83%	0.58%	6.26%	6.18%	2.13%	29.70%
2013	-18.08%	4.84%	1.63%	5.10%	4.93%	1.69%	25.82%
2014	-14.10%	3.89%	1.81%	4.98%	4.23%	2.01%	21.36%
2015	-16.15%	3.32%	2.07%	4.46%	3.70%	2.71%	19.51%
2016	-14.37%	2.96%	2.89%	4.63%	4.06%	2.94%	18.54%
2017	-13.52%	2.57%	1.43%	4.22%	4.12%	3.78%	17.65%
2018	-14.95%	2.43%	1.70%	4.48%	3.02%	3.83%	16.10%