



Statens vegvesen

# Mengderapportering vinteren 2009/2010

**RAPPORT**

Teknologiavdelingen

Nr. 2606



Vegteknologiseksjonen  
Dato: 2010-08-03



**Statens vegvesen**

## TEKNOLOGIRAPPORT nr. 2606

Tittel

### Mengderapportering vinteren 2009/2010

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Antall sider og vedlegg:

19

#### Sammendrag

Denne rapporten er utarbeidet for å få en oversikt over ressursbruken i vinterdriften, samt for å få et bilde av utviklingen fra 2004 til 2010. Rapporten inneholder tall for salting, sanding og brøyting.

#### Summary

This report was created in order to get an overview of the resource use in the winter operation, and to get a picture of the development from 2004 to 2010. This report contains data for salt use, sand use and snow-clearing.

#### Emneord:

vinterdrift, mengderapportering, salting, sanding, brøyting

## **Forord**

Denne rapporten er utarbeidet for å få en oversikt over ressursbruken i vinterdriften, samt for å få et bilde av utviklingen fra 2004 til 2010.

Rapporten er basert på data fra skjema R12, definert i funksjonskontraktene der entreprenørene rapporterer inn mengdedata for hver kontrakt. Det kan være mangler i datagrunnlaget.

Vegkategorier for 2009 er brukt i denne rapporten.

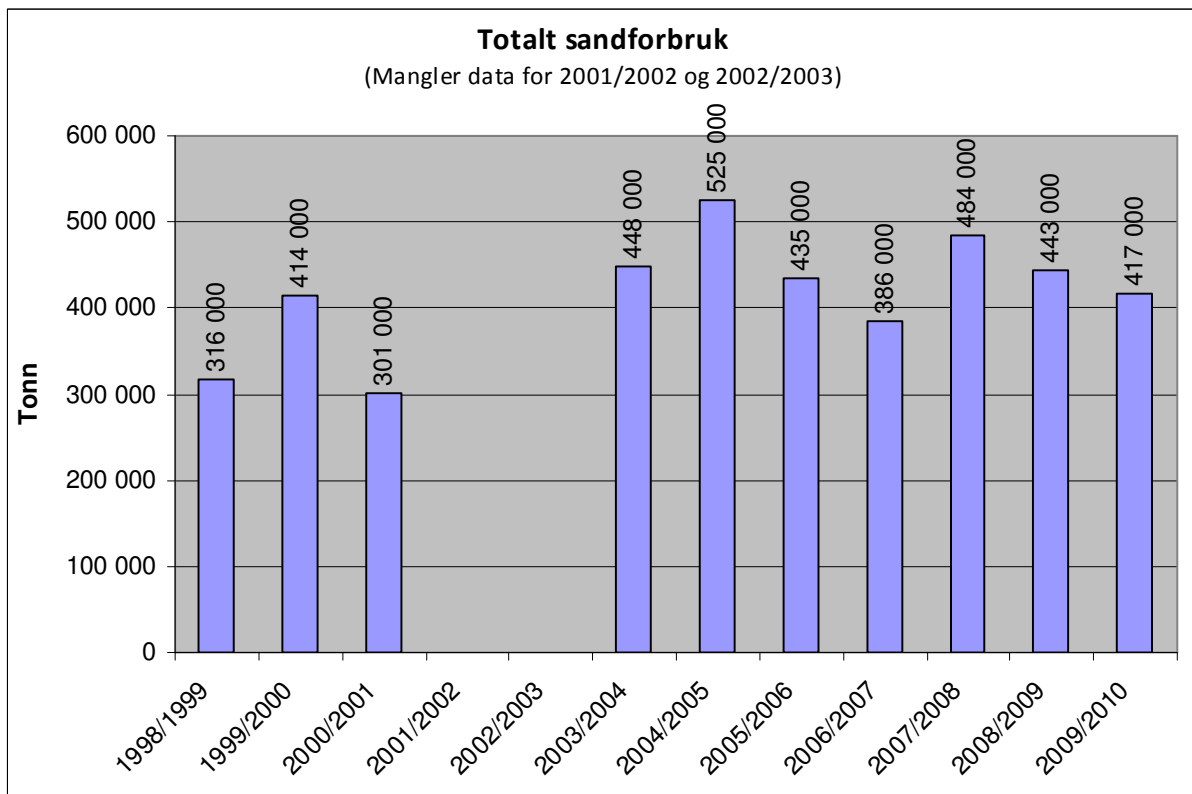
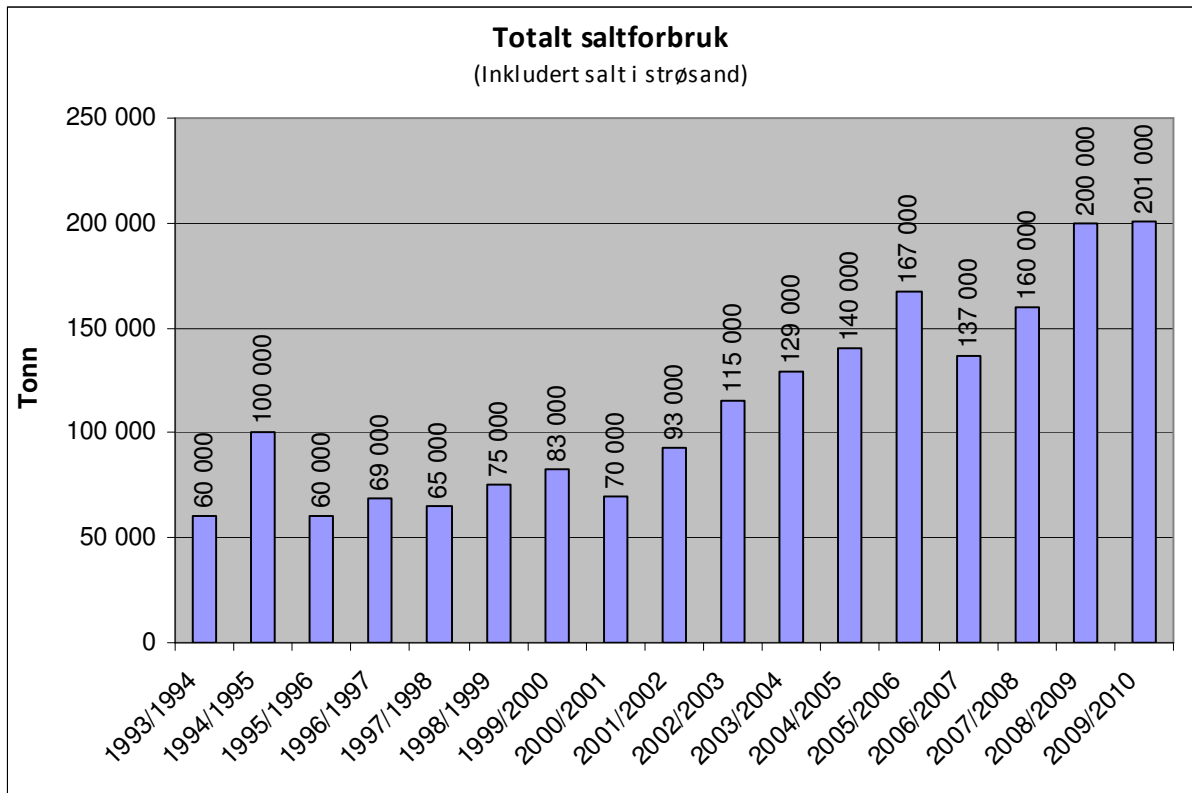
De årlige mengdene omfatter vintersesongen fra oktober til mai. Det oppgitte årstallet i diagrammene viser til siste halvdel av sesongen.

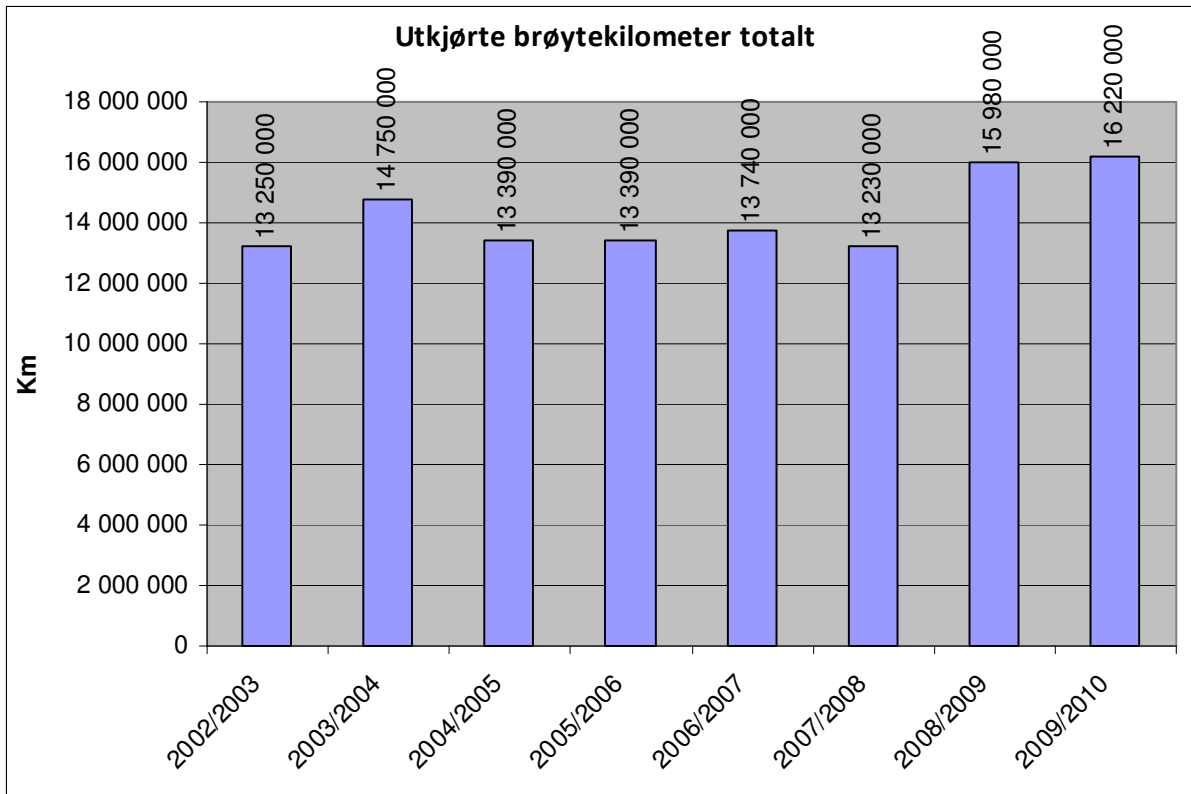
Årlige klimavariasjoner kan ha stor betydning for ressursbruken fra år til år.

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## Utvikling i mengde per år





## Mengdetabell

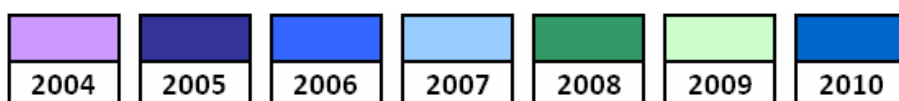
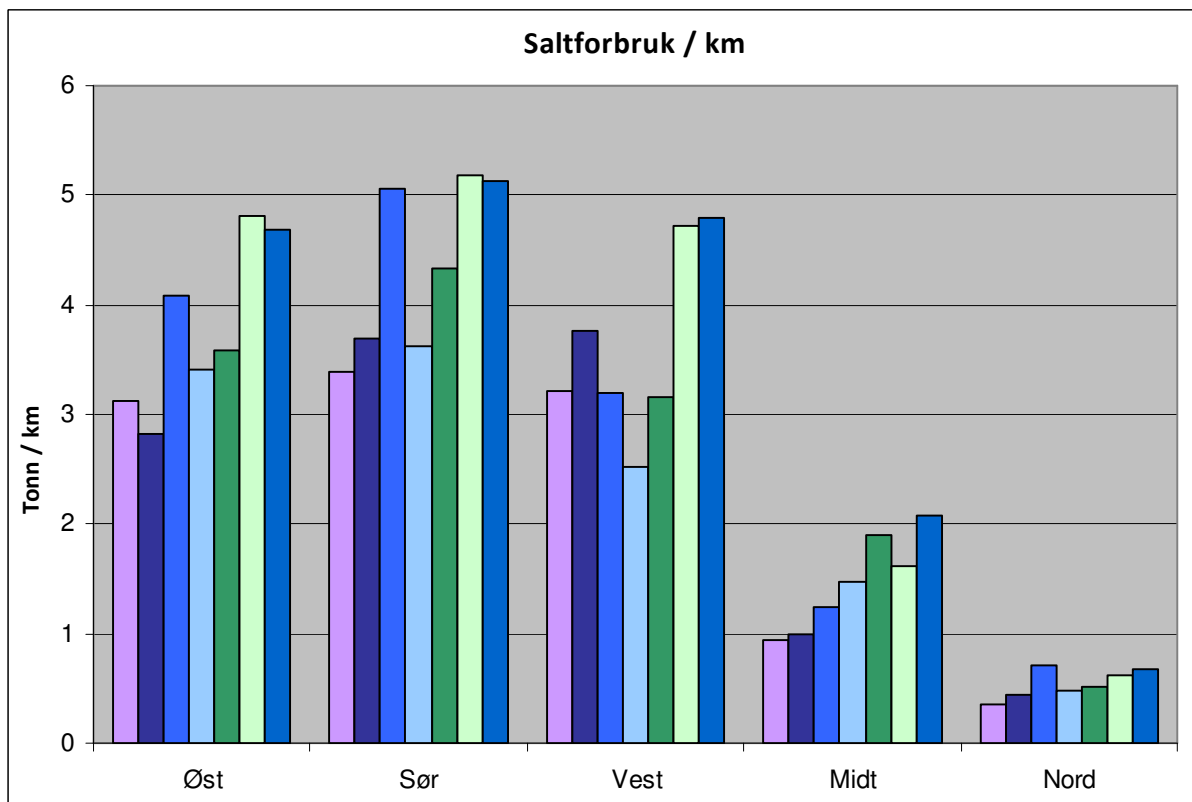
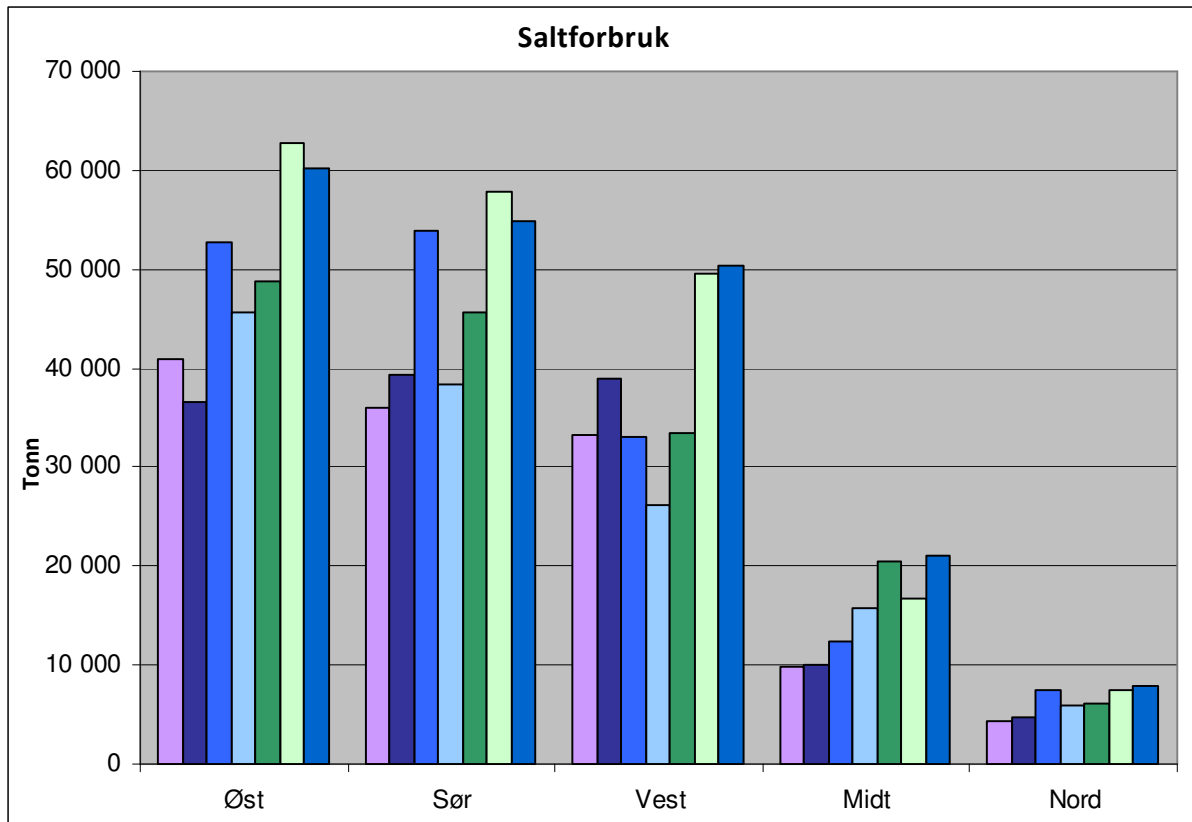
Region		Øst	Sør	Vest	Midt	Nord	Landet
		Tonn	Tonn	Tonn	Tonn	Tonn	Tonn
<b>SALTING</b>							
Salting. Forbruk av salt på veger med strategi bar veg .	Sum stamveg	25 132	27 259	12 761	6 339	0	71 491
	Sum øvrig Rv	17 704	16 833	4 958	4 248	508	44 249
	Sum G/S-veg	0	0	1 328	0	0	1 328
	Sum Fv	7 527	4 385	11 531	210	0	23 653
	<b>Totalt:</b>	<b>50 363</b>	<b>48 477</b>	<b>30 577</b>	<b>10 796</b>	<b>508</b>	<b>140 721</b>
Salting. Forbruk av salt på veger med strategi vinterveg.	Sum stamveg	2 827	903	3 204	2 673	3 790	13 396
	Sum øvrig Rv	5 077	3 275	3 457	4 998	2 256	19 063
	Sum G/S-veg	346	1	1 277	12	12	1 648
	Sum Fv	1 467	2 152	11 740	2 561	1 304	19 223
	<b>Totalt:</b>	<b>9 717</b>	<b>6 330</b>	<b>19 678</b>	<b>10 244</b>	<b>7 362</b>	<b>53 331</b>
Salting. Totalt saltforbruk.	Sum stamveg	27 959	28 162	15 965	9 012	3 790	84 887
	Sum øvrig Rv	22 781	20 107	8 415	9 246	2 764	63 313
	G/S-veg	346	1	2 605	12	12	2 976
	Sum Fv	8 994	6 537	23 270	2 771	1 304	42 876
	<b>Totalt</b>	<b>60 079</b>	<b>54 807</b>	<b>50 255</b>	<b>21 040</b>	<b>7 870</b>	<b>194 051</b>
Forbruk av salt i strøsand.	<b>Totalt:</b>	<b>882</b>	<b>248</b>	<b>311</b>	<b>1 575</b>	<b>3 846</b>	<b>6 863</b>
Salt, inkludert salt i strøsand.	<b>Totalt:</b>	<b>60 961</b>	<b>55 055</b>	<b>50 566</b>	<b>22 616</b>	<b>11 716</b>	<b>200 914</b>
Fordeling på ulike saltingsmetoder. (Her kan man se at det har vært en del underrapportering)	Tørr salt	12 553	21 120	12 821	2 754	741	49 988
	Befuktet salt	30 566	23 460	28 856	10 177	2 047	95 106
	Slurry	1 188	6 189	2 174	3 914	997	14 462
	Saltløsning	1 708	3 498	5 043	2 199	395	12 843
	<b>Totalt</b>	<b>46 015</b>	<b>54 267</b>	<b>48 894</b>	<b>19 043</b>	<b>4 179</b>	<b>172 399</b>
Bruk av andre typer kjemikalier i vinterdriften.	Magnesiumklorid	1 261	47	4	126	71	1 509
	Annet, beskriv	4	233	0	0	0	237
	Annet, beskriv	0	0	0	0	0	0
	<b>Totalt:</b>	<b>1 265</b>	<b>280</b>	<b>4</b>	<b>126</b>	<b>71</b>	<b>1 746</b>

Region		Tonn	Tonn	Tonn	Tonn	Tonn	Tonn
		<b>SANDING</b>					
Sanding. Forbruk av sand uten saltinnblanding.	Sum stamveg	7 124	1 961	4 044	8 672	5 821	27 623
	Sum øvrig Rv	7 907	19 864	2 024	24 219	5 818	59 831
	G/S-veg	2 348	1 912	1 806	634	213	6 912
	Sum Fv	16 605	29 415	9 264	21 364	4 572	81 221
	<b>Totalt:</b>	<b>33 984</b>	<b>53 153</b>	<b>17 138</b>	<b>54 889</b>	<b>16 424</b>	<b>175 587</b>
Sanding. Forbruk av saltblandet sand.	Sum stamveg	6 480	2 022	396	9 566	31 111	49 574
	Sum øvrig Rv	8 929	4 371	2 353	27 183	37 238	80 074
	G/S-veg	328	70	492	1 277	1 954	4 121
	Sum Fv	15 635	2 530	9 824	30 131	34 803	92 922
	<b>Totalt:</b>	<b>31 372</b>	<b>8 993</b>	<b>13 065</b>	<b>68 156</b>	<b>105 105</b>	<b>226 691</b>
Sanding. Totalt sandforbruk.	Sum stamveg	13 603	3 983	4 440	18 238	48 433	88 697
	Sum øvrig Rv	16 837	24 236	4 376	51 401	45 331	142 181
	G/S-veg	2 676	1 982	2 299	1 911	2 351	11 217
	Sum Fv	32 240	31 945	19 088	51 495	40 260	175 028
	<b>Totalt:</b>	<b>65 355</b>	<b>62 145</b>	<b>30 202</b>	<b>123 045</b>	<b>136 375</b>	<b>417 124</b>

Region		Km	Km	Km	Km	Km	Km
		<b>BRØYTEKILOMETER</b>					
Brøytekilometer	Sum stamveg	563 868	950 380	661 802	504 377	1 364 719	4 045 146
	Sum øvrig Rv	762 737	1 112 138	586 498	1 316 846	2 029 408	5 807 627
	G/S-veg	51 753	130 912	67 168	54 810	41 671	346 313
	Sum Fv	792 014	1 238 466	1 516 566	1 086 439	1 388 236	6 021 721
	<b>Totalt:</b>	<b>2 170 372</b>	<b>3 431 896</b>	<b>2 832 034</b>	<b>2 962 471</b>	<b>4 824 034</b>	<b>16 220 807</b>

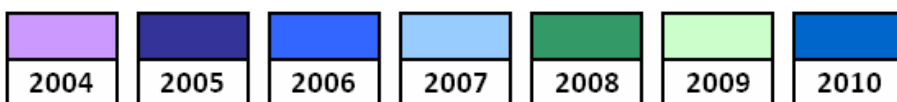
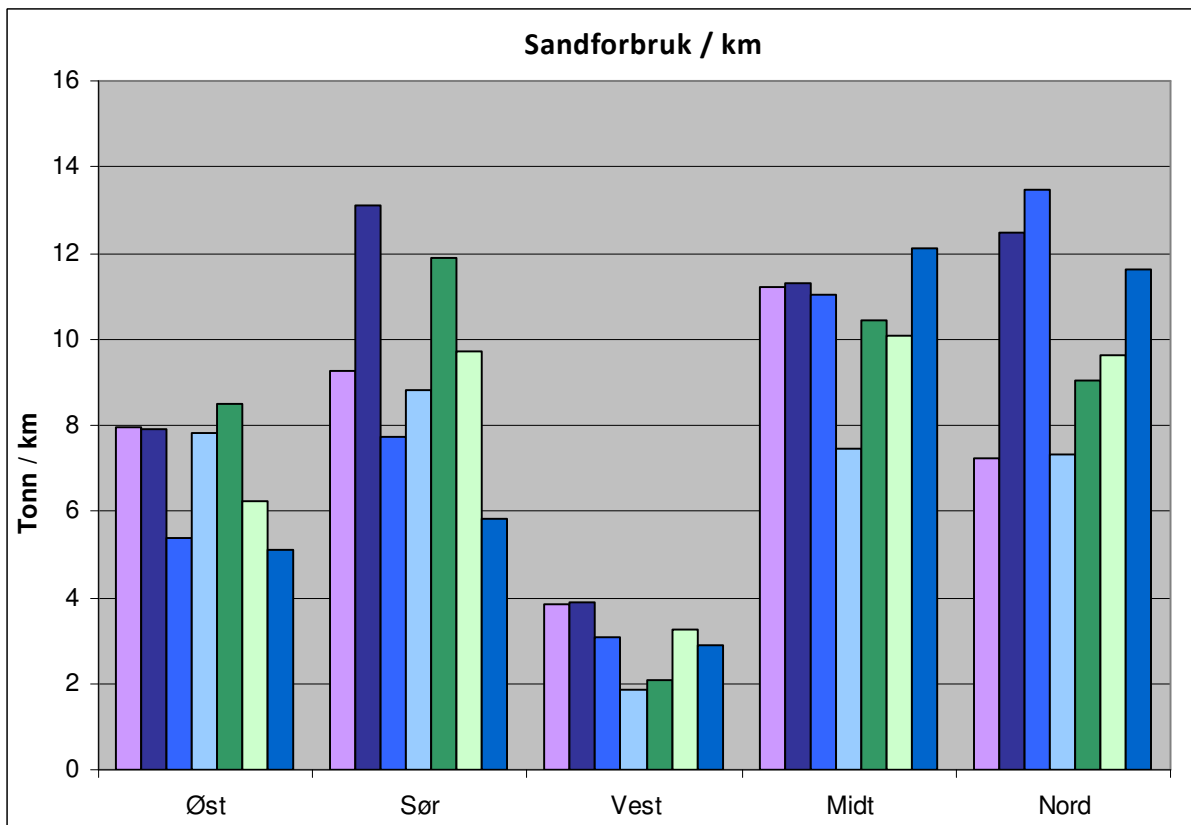
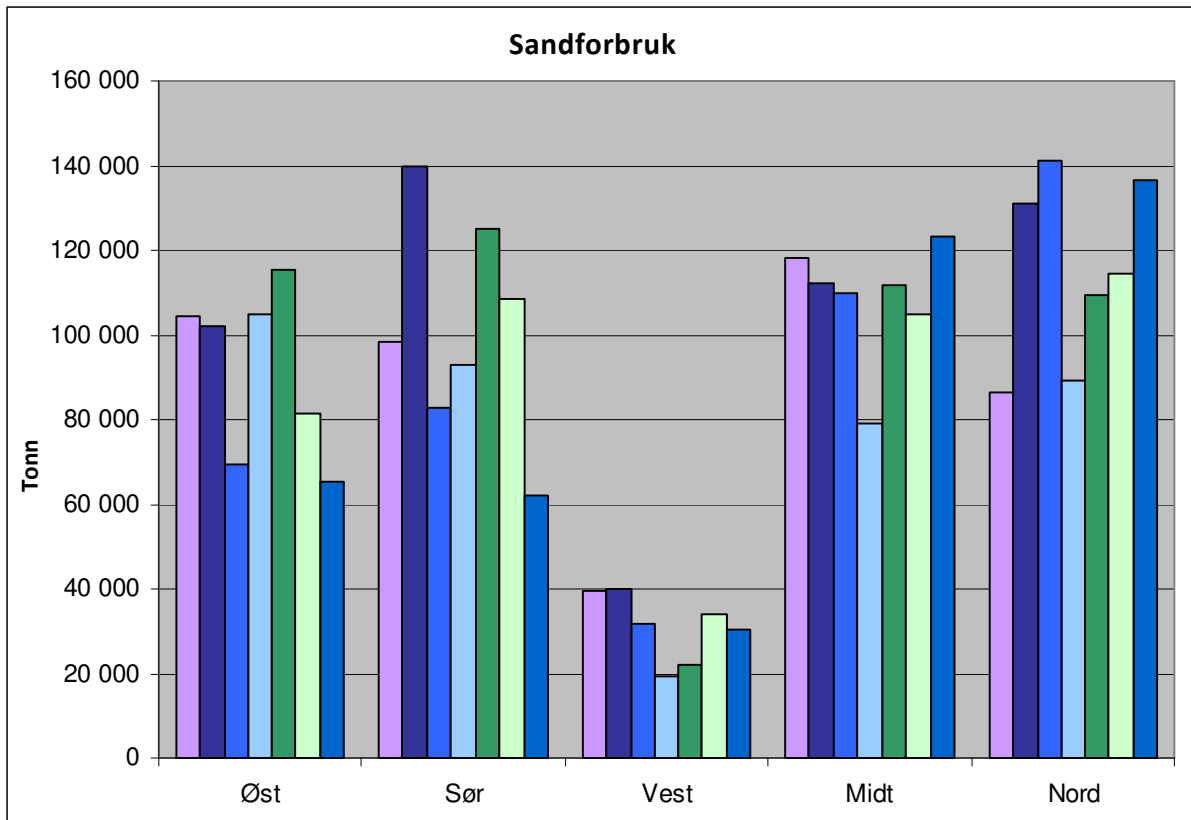
Region		Kilometer					
		<b>VEGLENGDER</b>					
Veglengder	<b>Stamveg total</b>	<b>1 892</b>	<b>1 519</b>	<b>1 465</b>	<b>1 164</b>	<b>2 826</b>	<b>8 866</b>
	Stamveg barveg	1 112	1 247	757	395	0	3 512
	Stamveg vinterveg	780	272	708	768	2 826	5 354
	<b>Øvrig riksveg total</b>	<b>3 949</b>	<b>3 350</b>	<b>3 448</b>	<b>3 665</b>	<b>3 815</b>	<b>18 228</b>
	Øvrig riksveg bar veg	1 363	1 354	749	156	0	3 622
	Øvrig riksveg vinterveg	2 586	1 997	2 699	3 509	3 853	14 644
	G/S-veg	803	684	668	267	355	2 777
	<b>Fylkesveg total</b>	<b>6 167</b>	<b>5 125</b>	<b>4 895</b>	<b>5 066</b>	<b>4 755</b>	<b>26 007</b>
	Fylkesveg barveg	620	507	610	21	0	1 758
	Fylkesveg vinterveg	5 547	4 617	4 285	5 045	4 843	24 337
	<b>Total veglengde</b>	<b>12 811</b>	<b>10 678</b>	<b>10 476</b>	<b>10 161</b>	<b>11 751</b>	<b>55 878</b>

## Saltforbruk per region

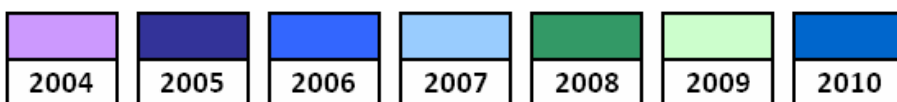
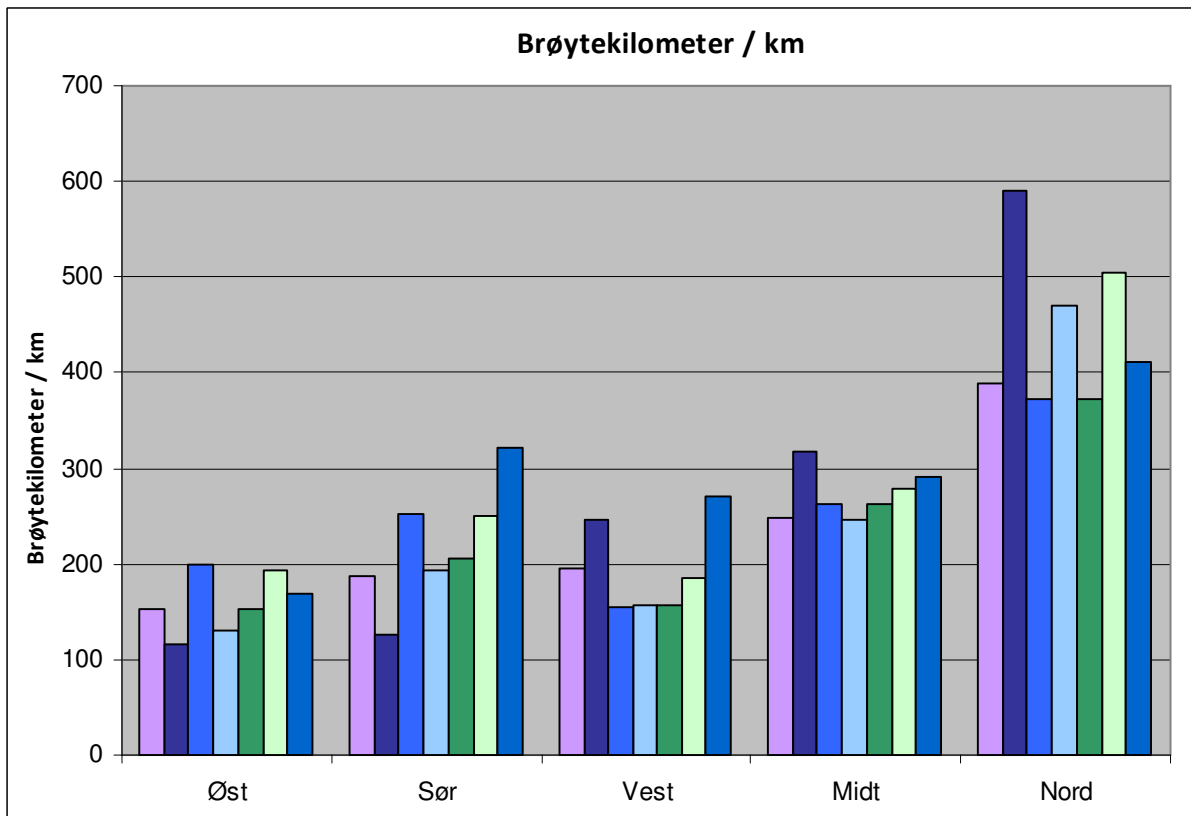
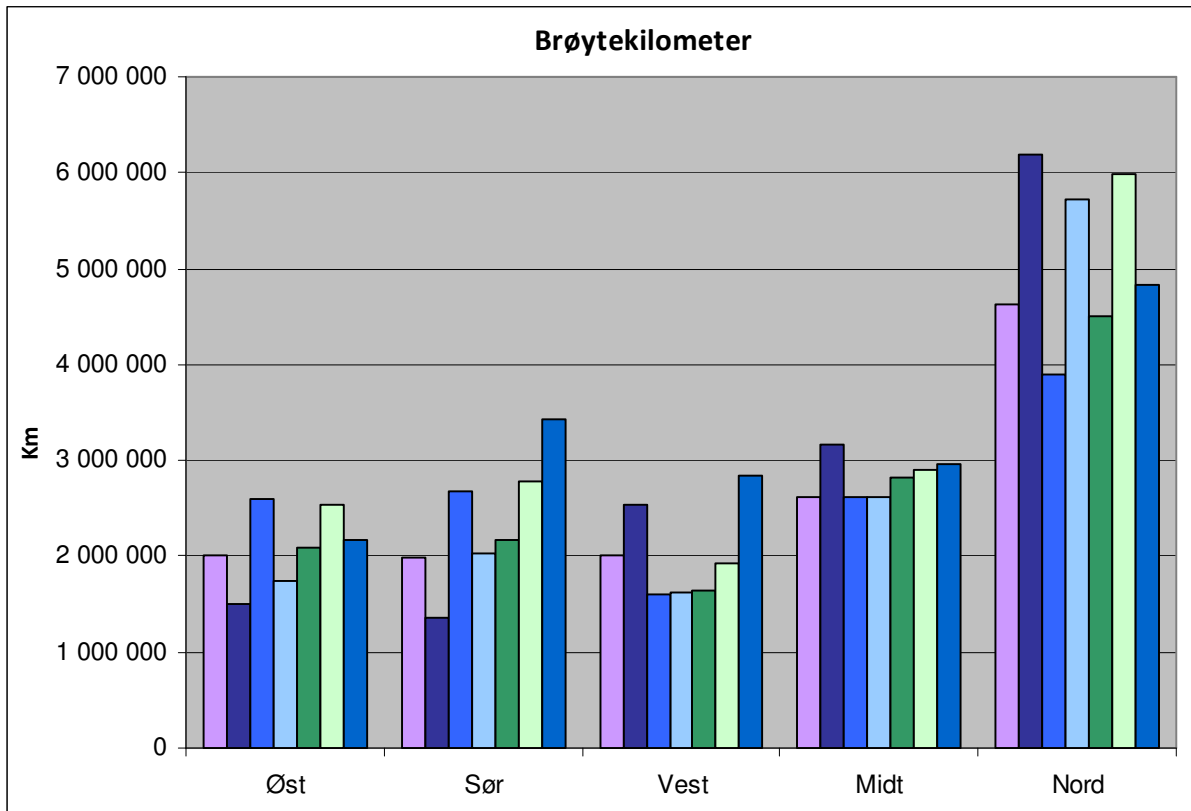




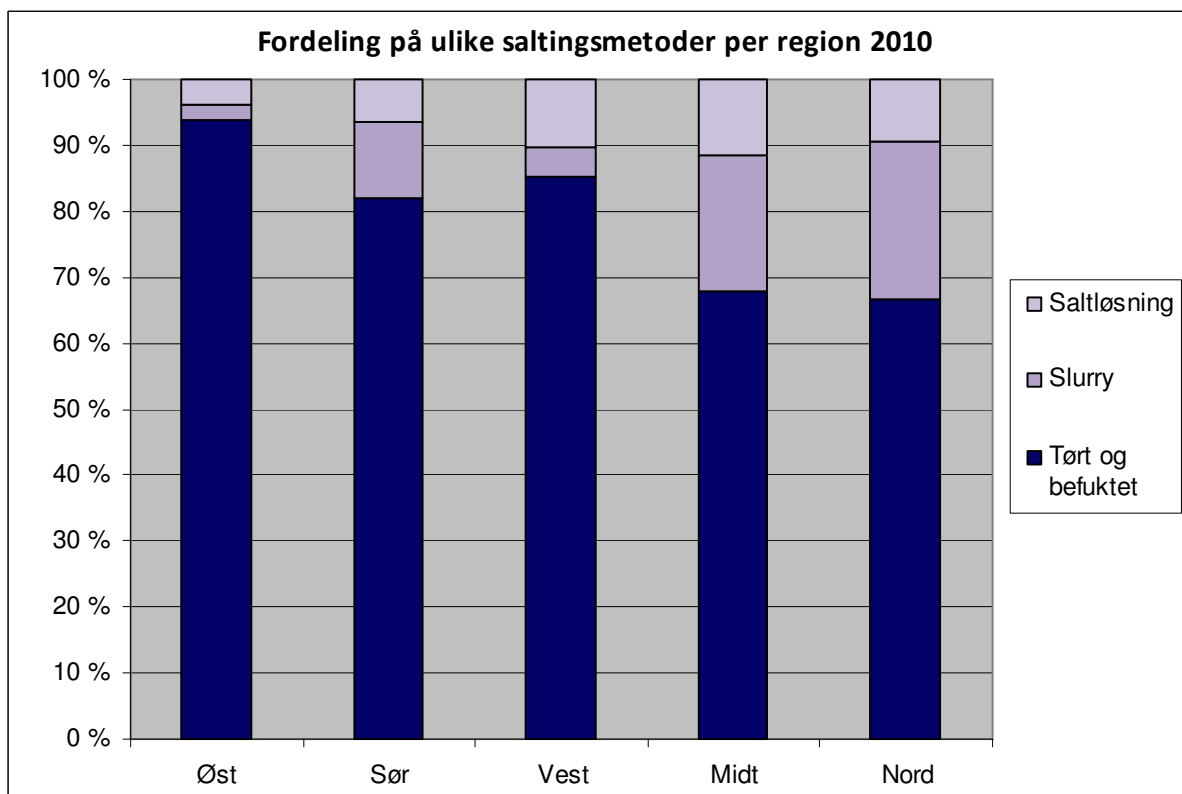
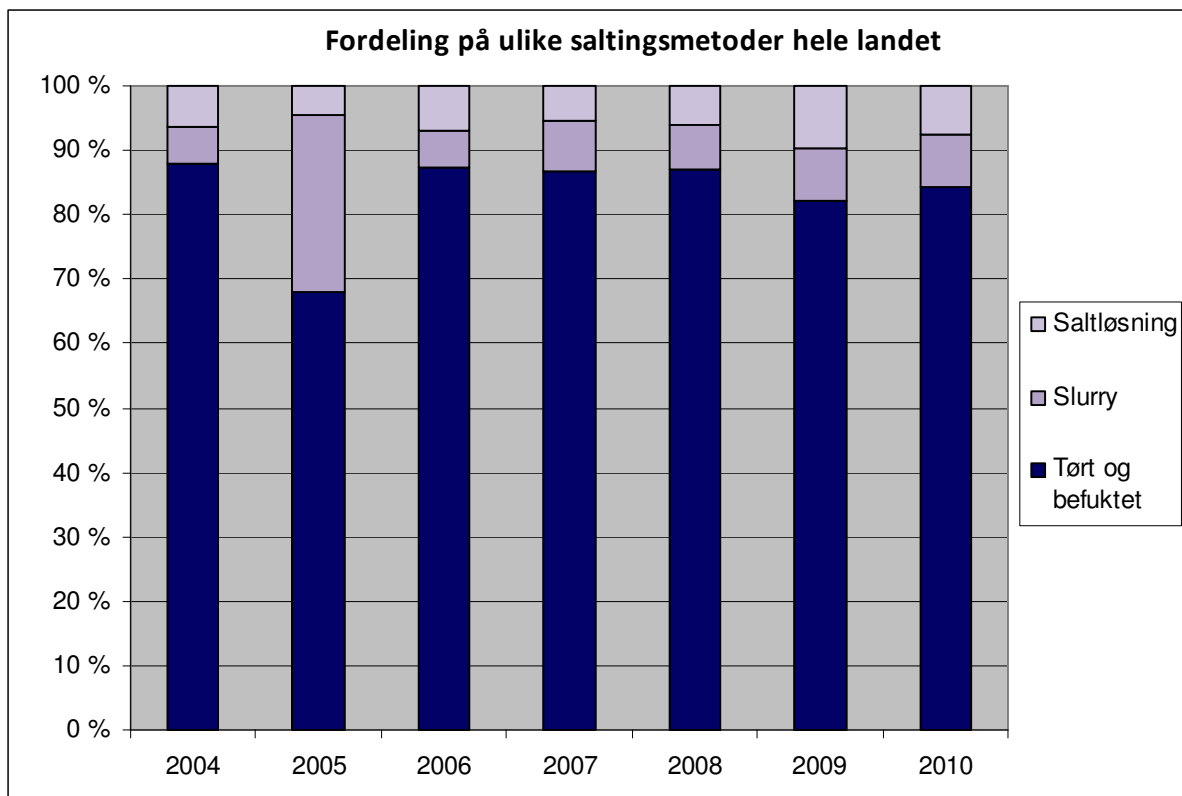
## Sandforbruk per region



## Brøytekilometer per region

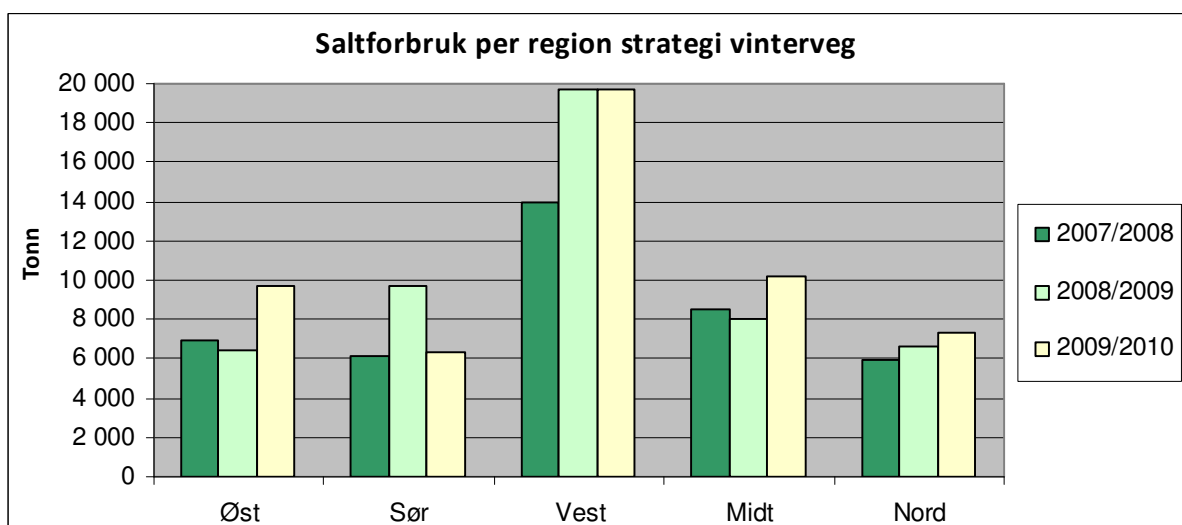
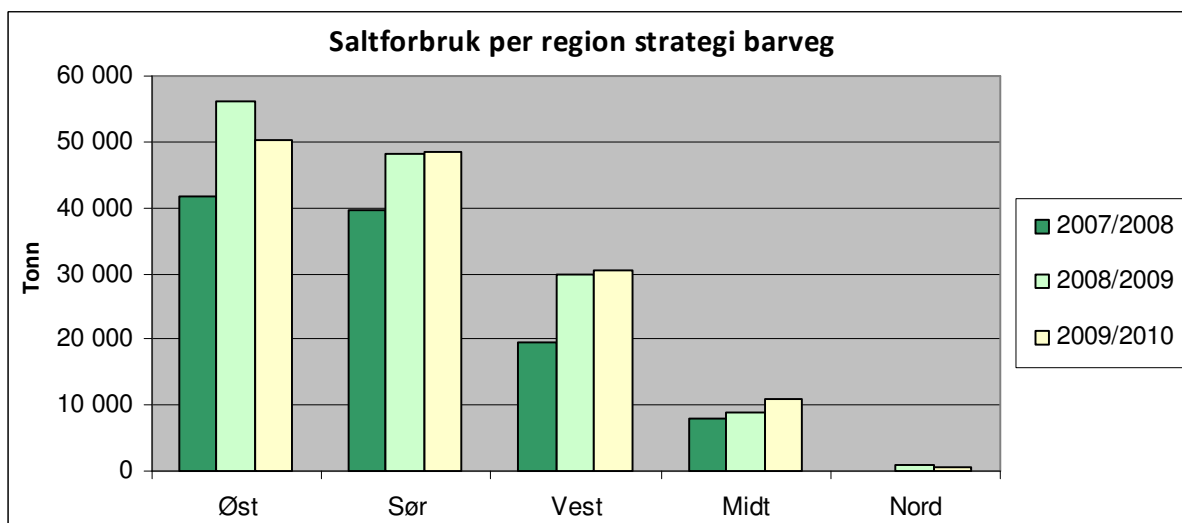
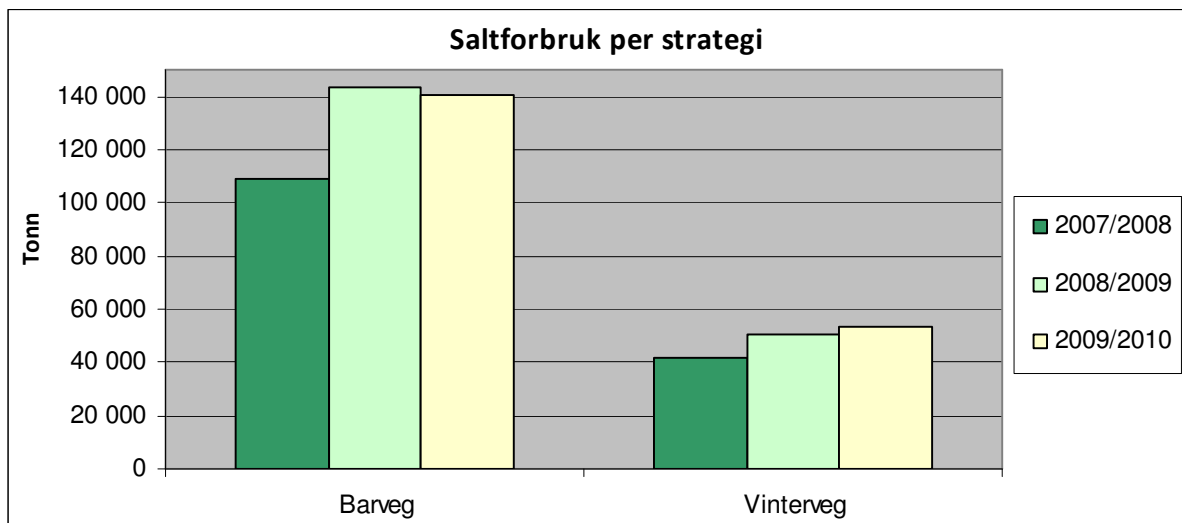


## Fordeling på ulike saltingsmetoder



## Saltforbruk på strategi barveg og vinterveg

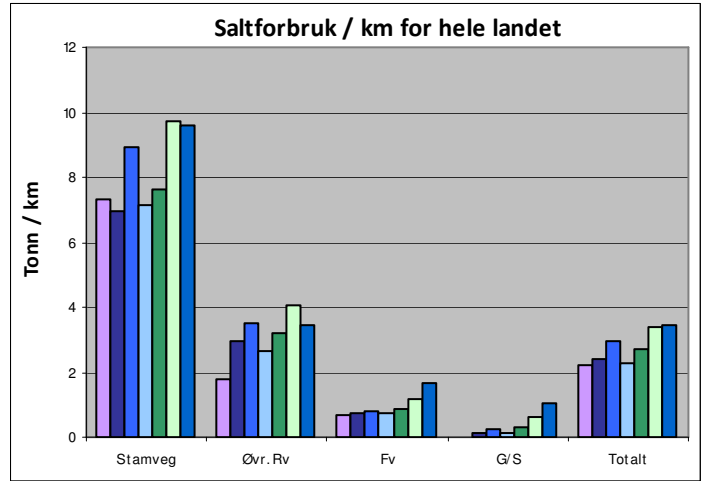
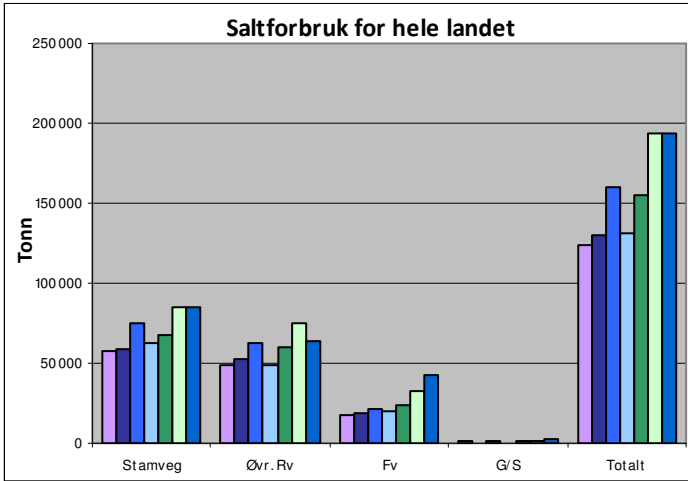
(Vegkategorier for 2009 er brukt)



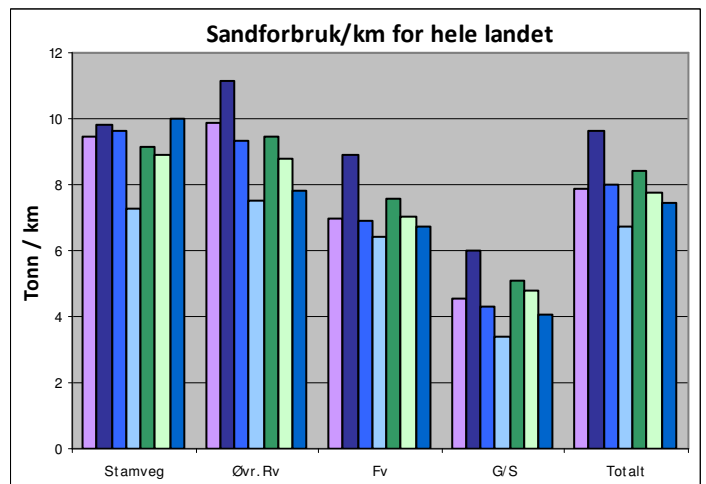
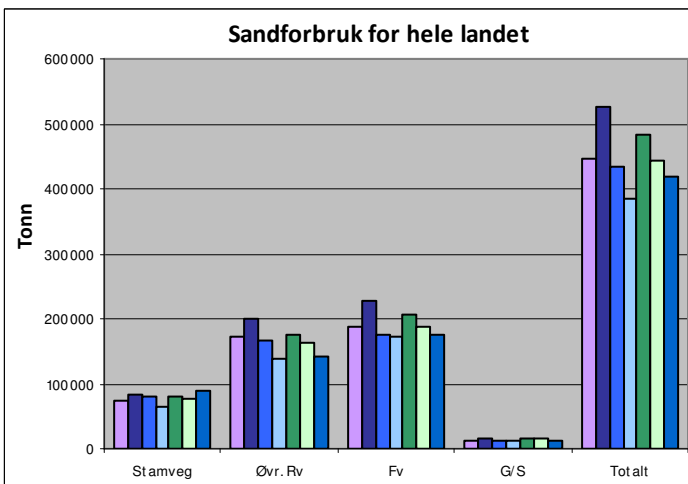
## Mengde per vegkategori for hele landet

### Saltforbruk per vegkategori for hele landet

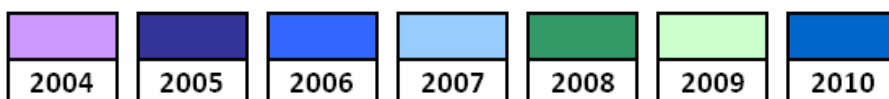
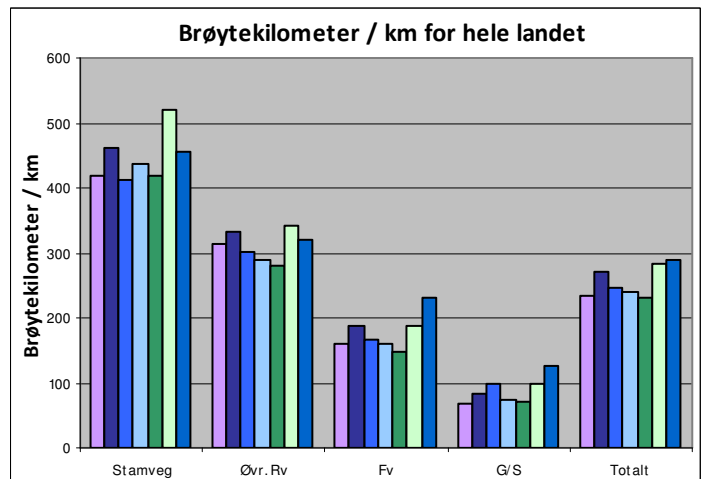
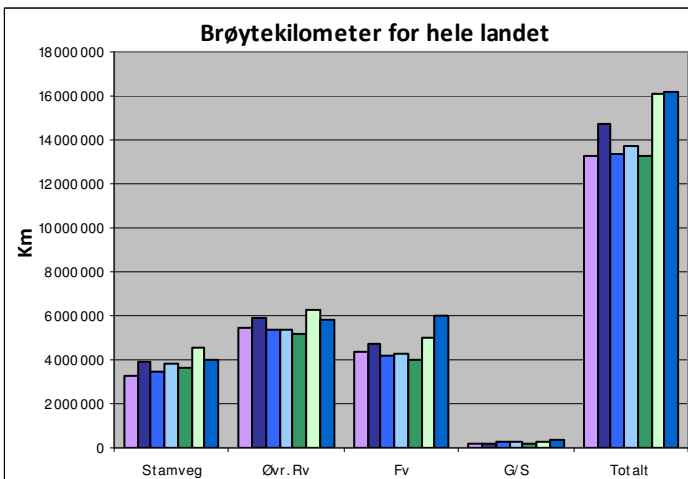
(Vegkategorier for 2009 er brukt)



### Sandforbruk per vegkategori for hele landet



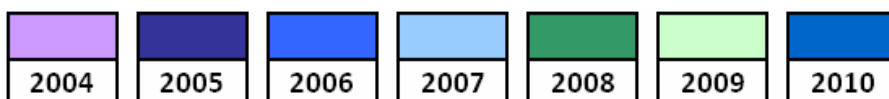
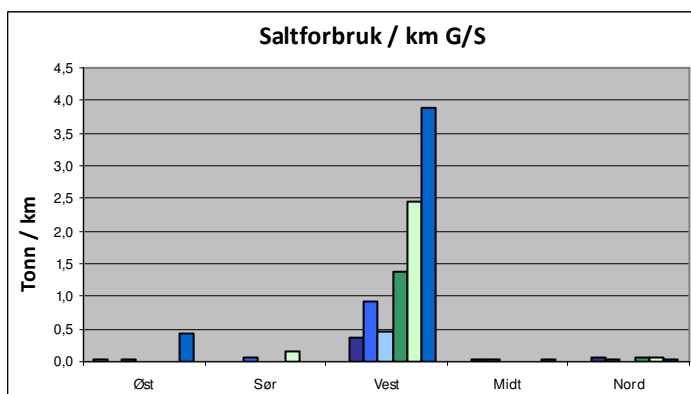
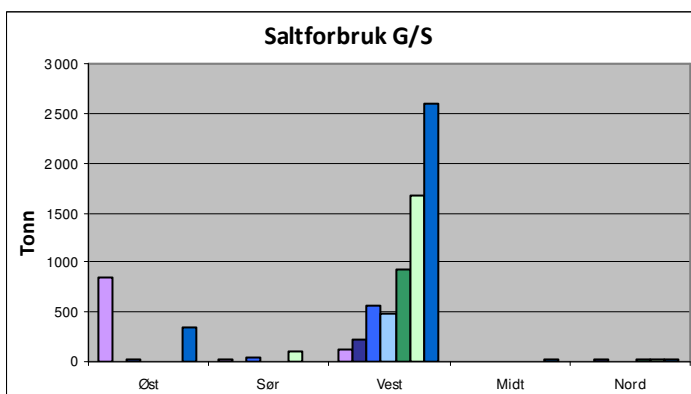
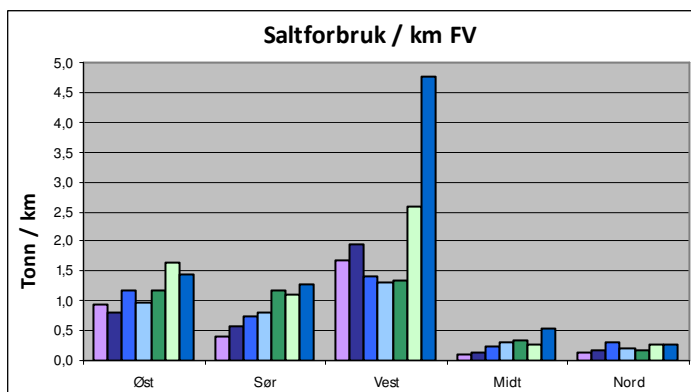
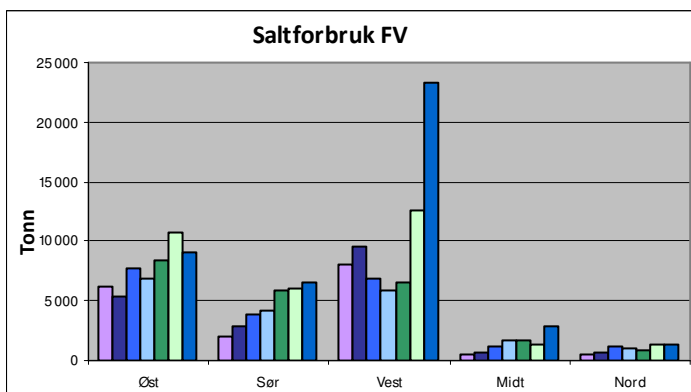
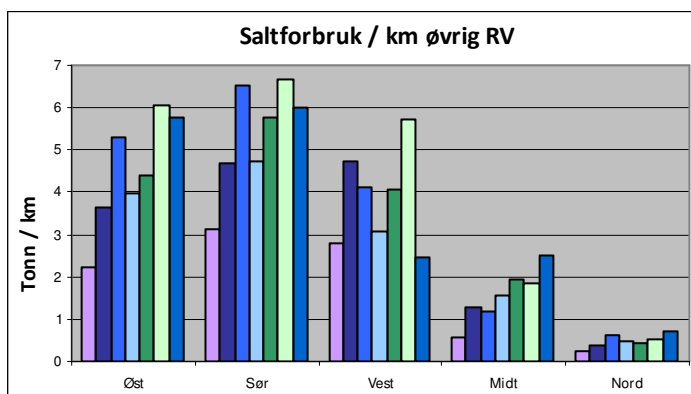
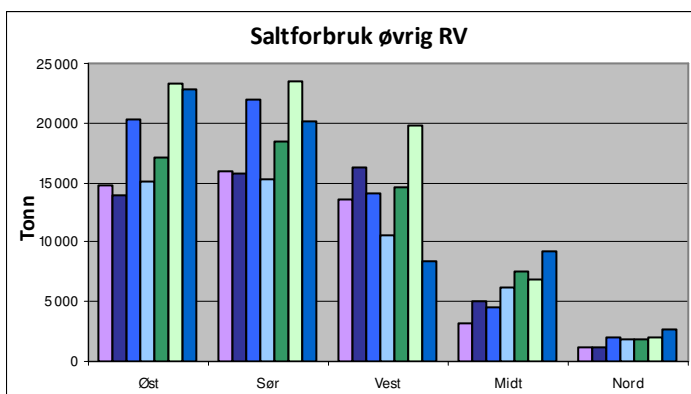
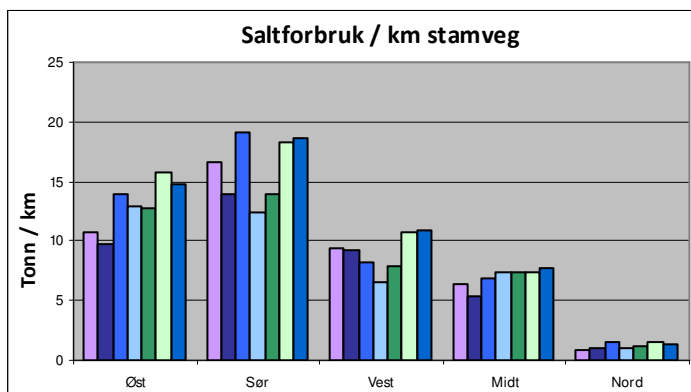
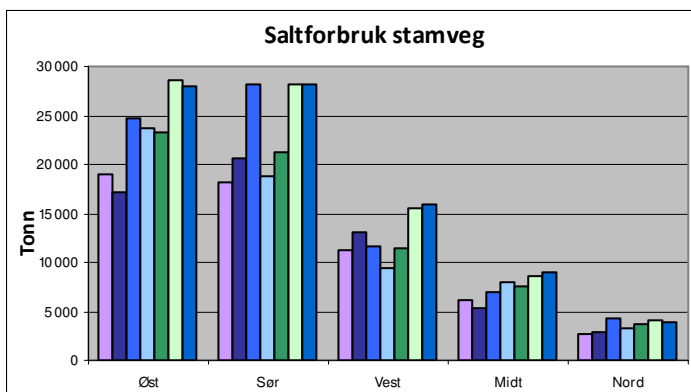
### Brøytekilometer per vegkategori for hele landet



# Sammenlikning mellom regioner

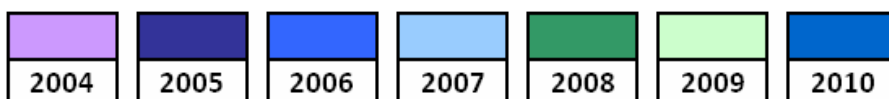
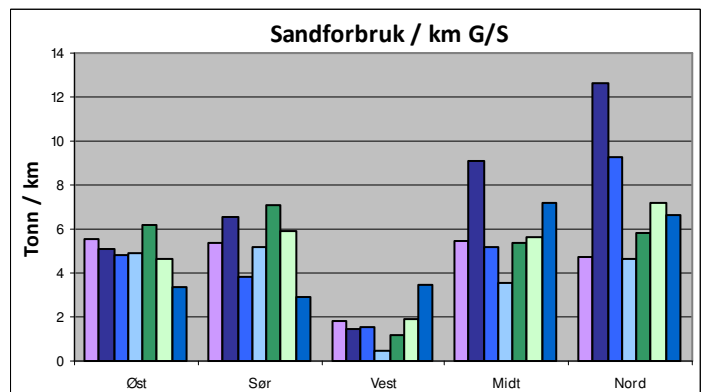
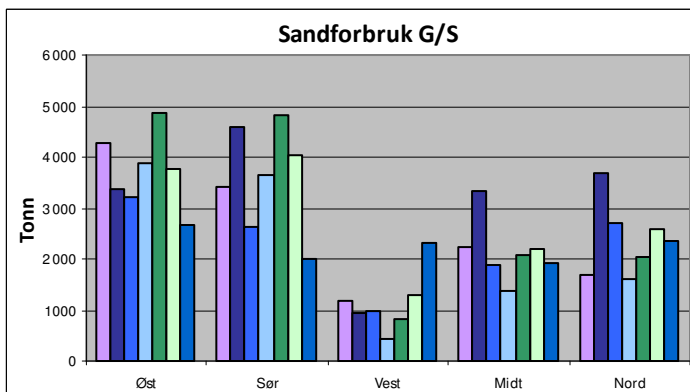
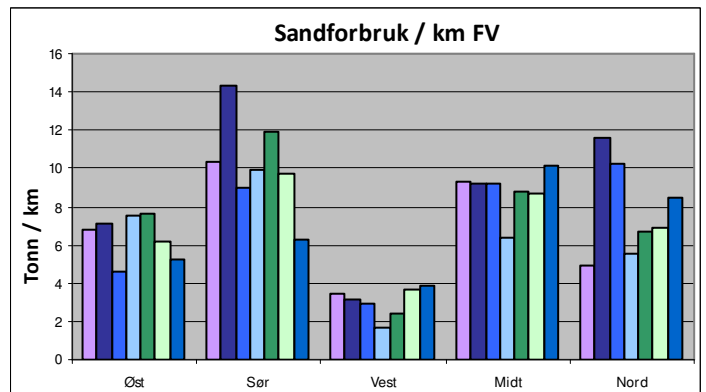
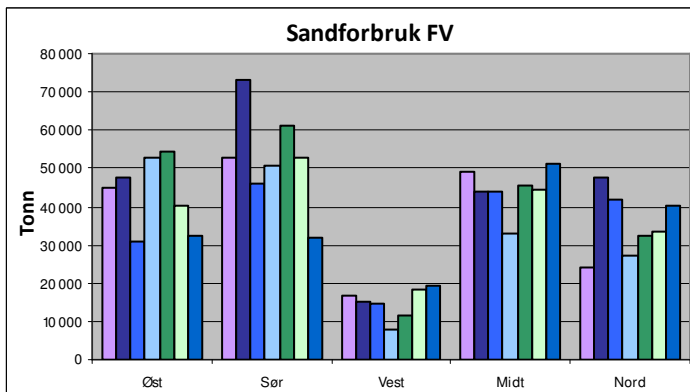
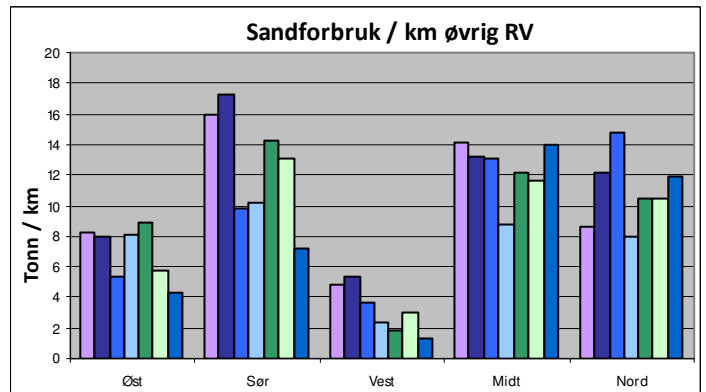
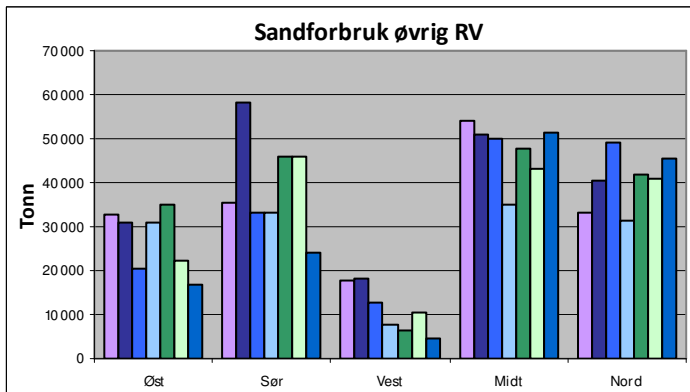
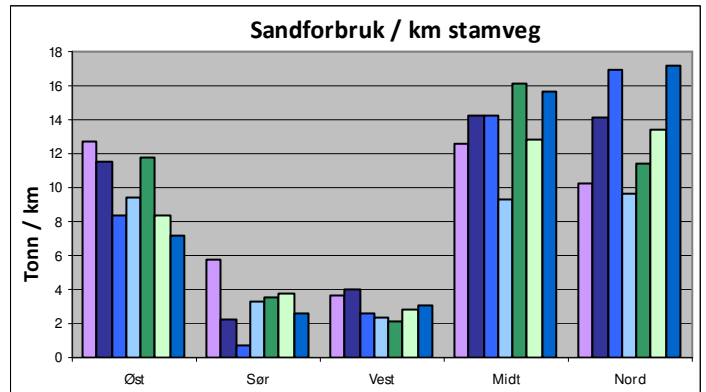
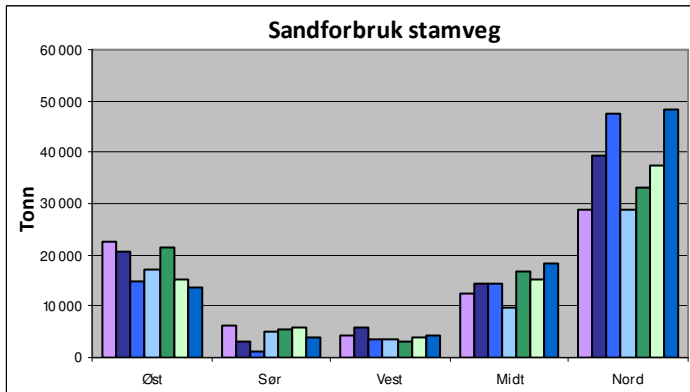
## Saltforbruk på ulike vegkategorier per region

(Vegkategorier for 2009 er brukt)



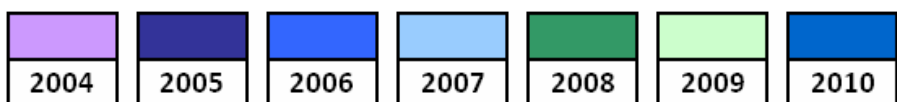
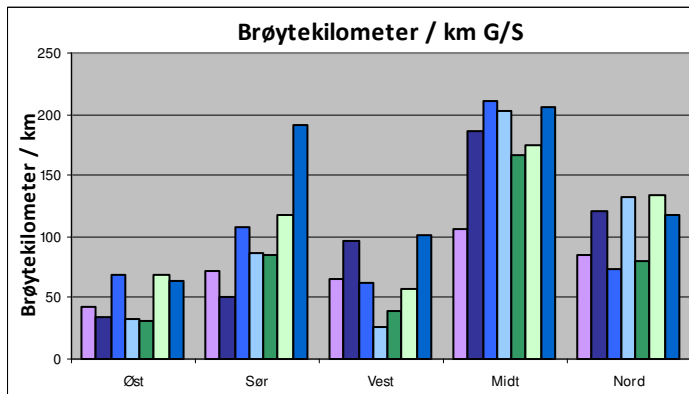
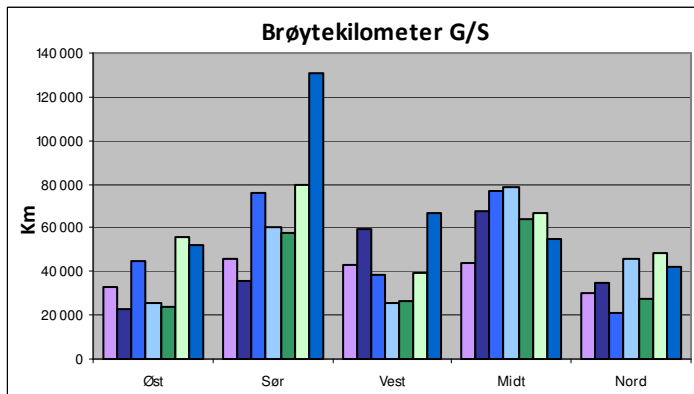
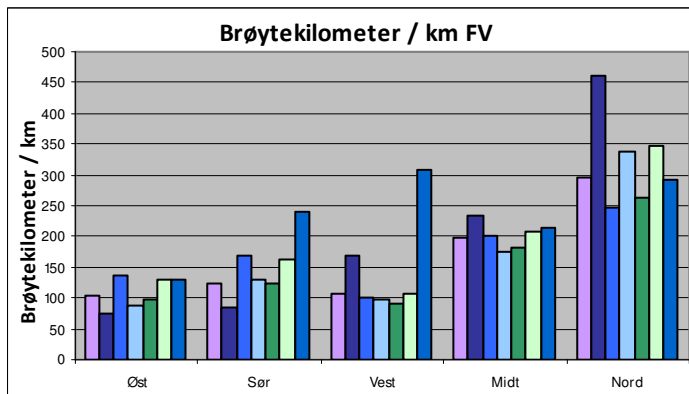
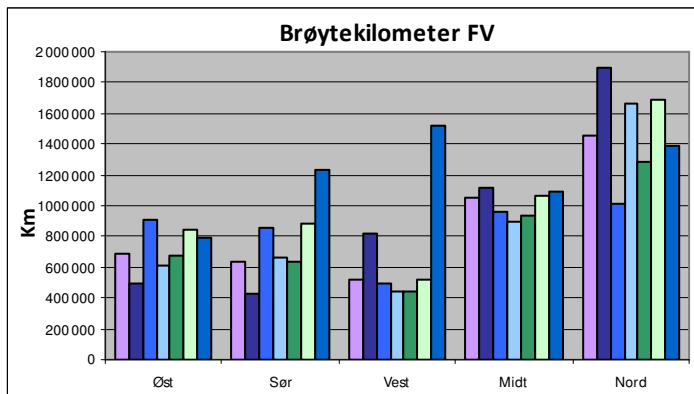
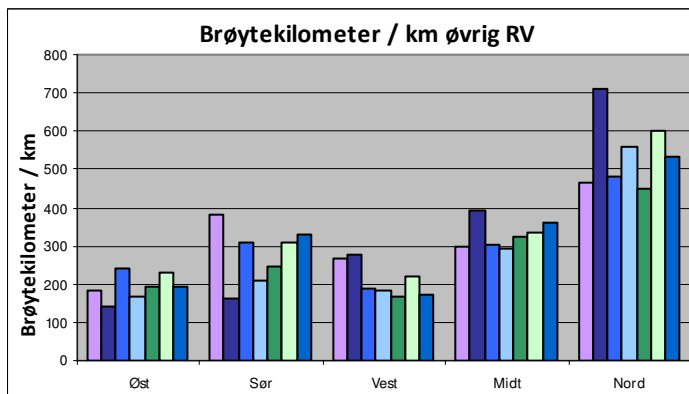
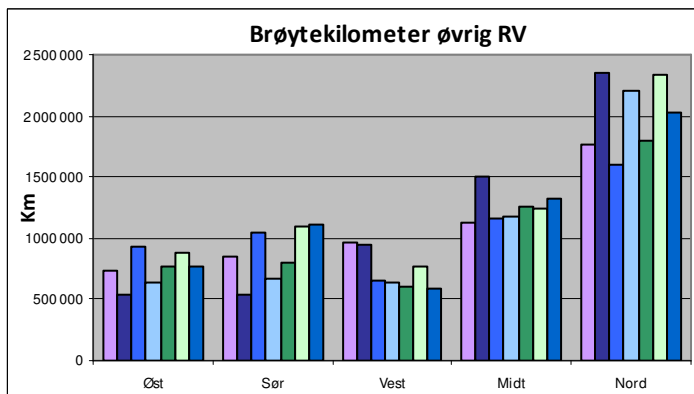
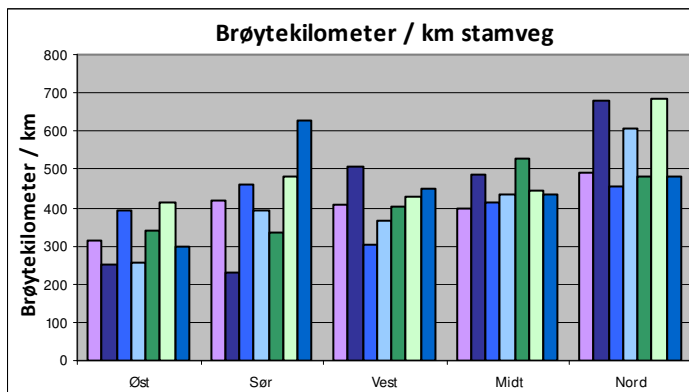
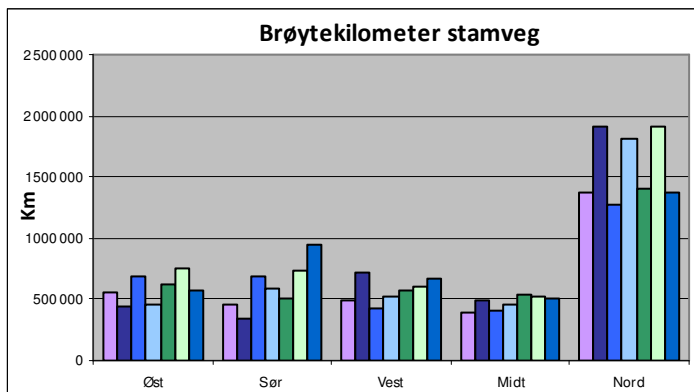
## Sandforbruk på ulike vegkategorier per region

(Vegkategorier for 2009 er brukt)



## Brøytekilometer på ulike vegkategorier per region

(Vegkategorier for 2009 er brukt)

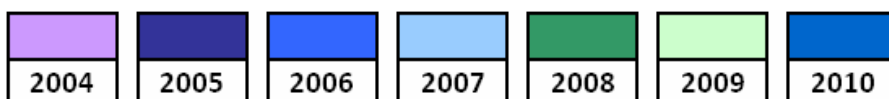
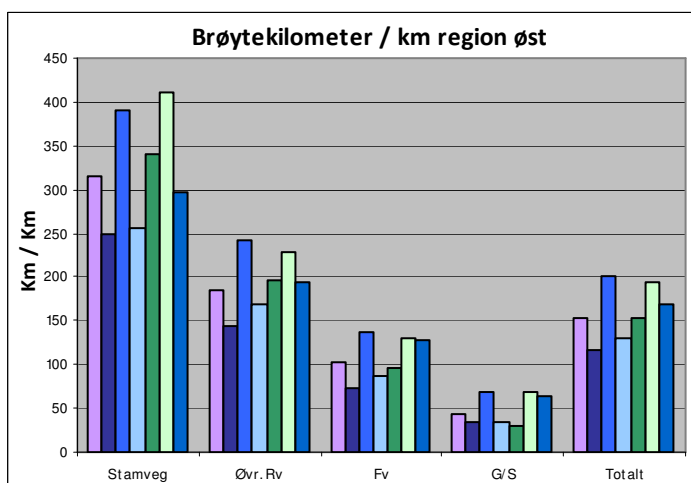
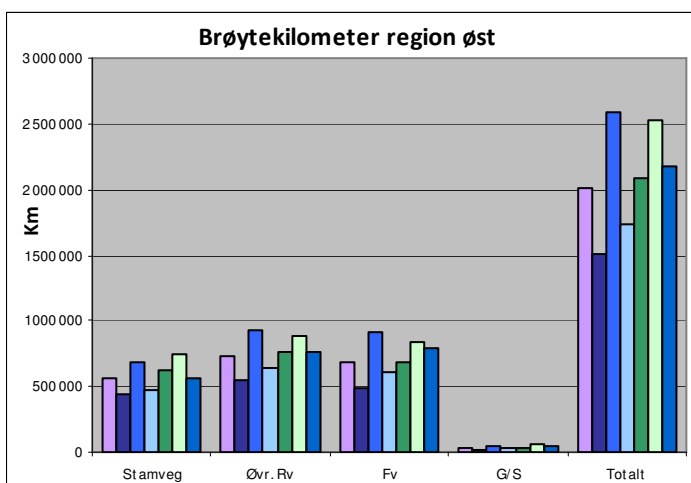
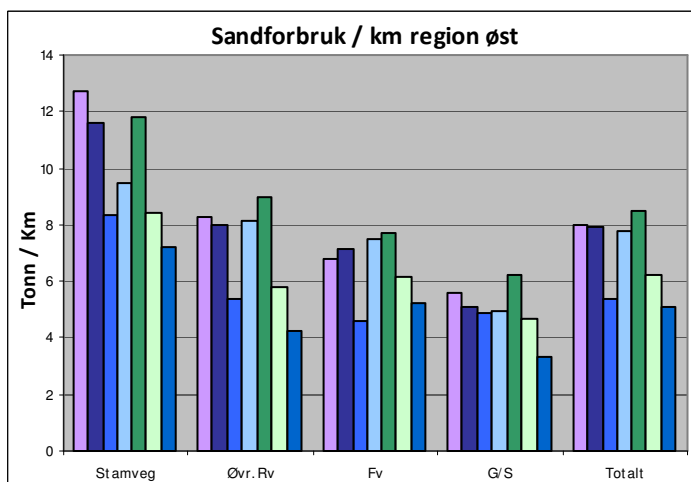
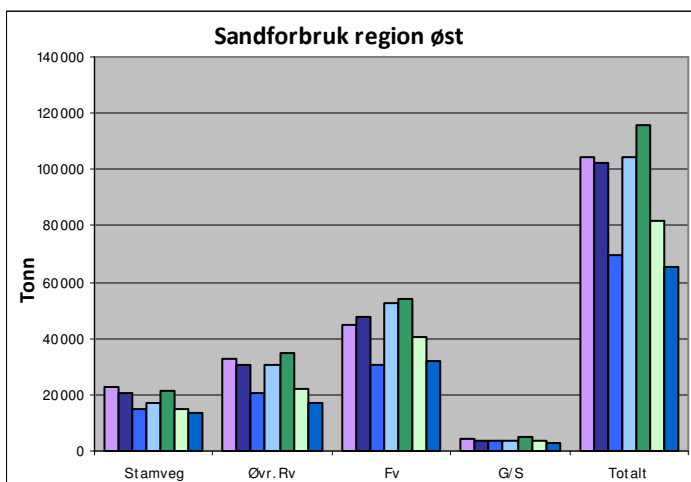
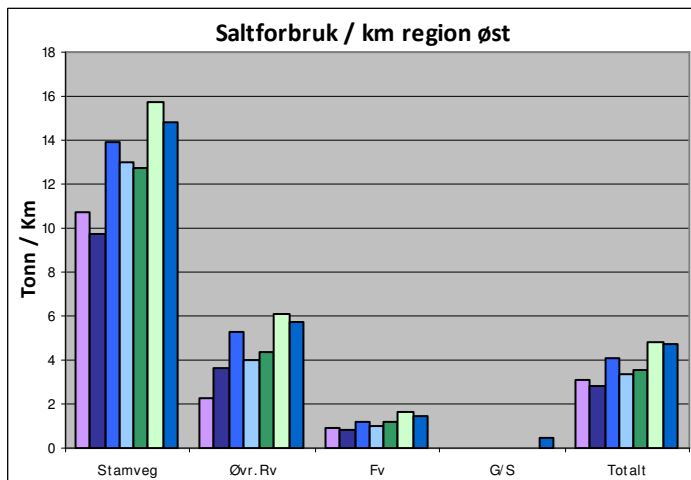
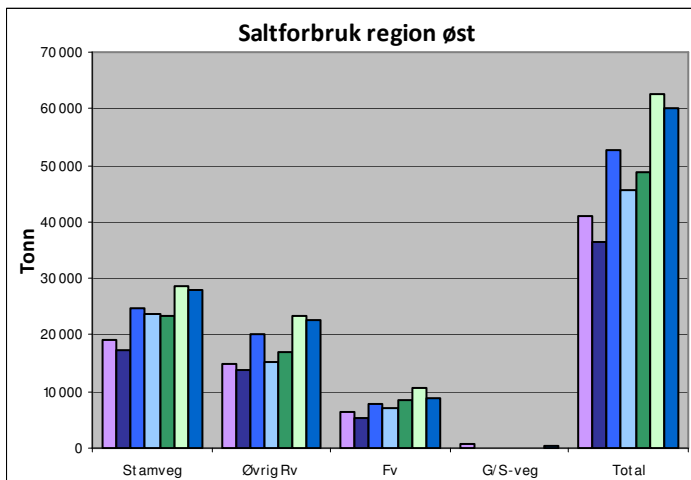




## Mengde fordelt på region

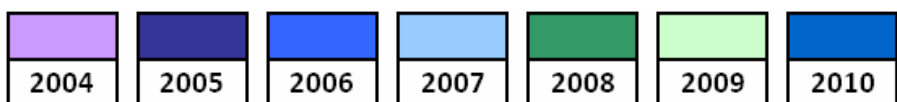
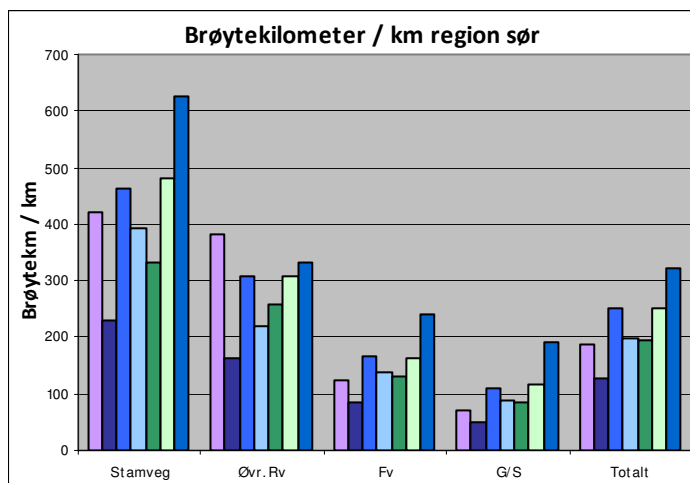
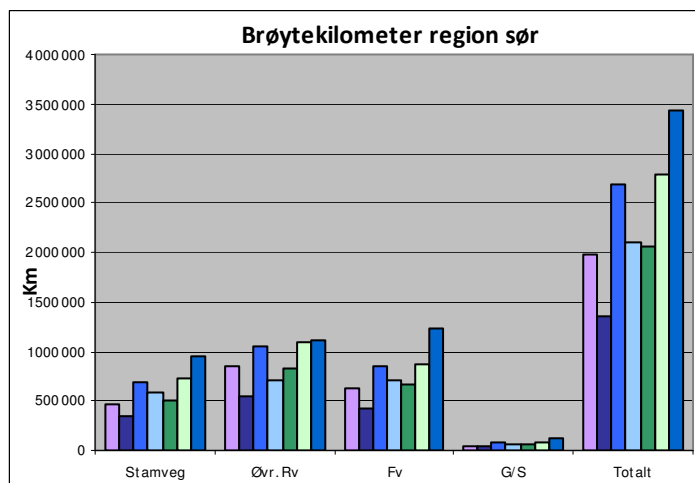
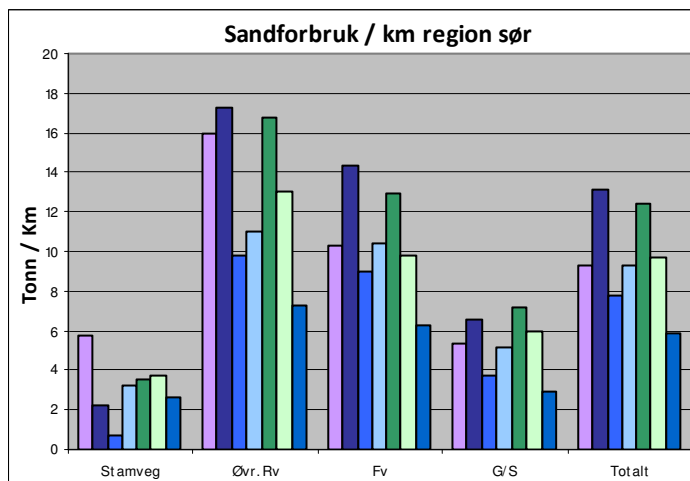
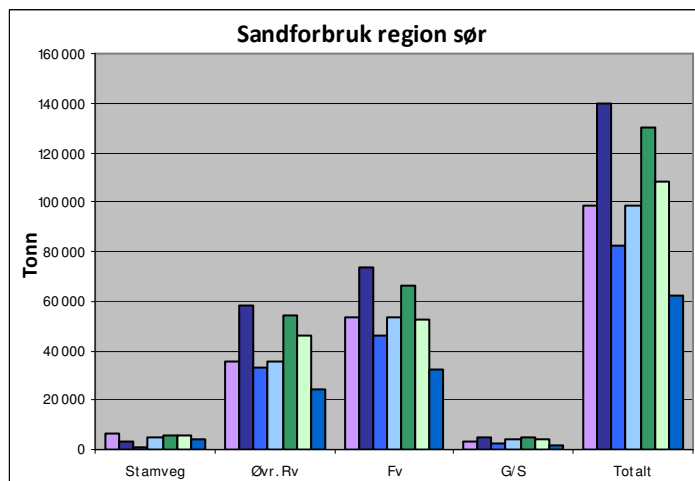
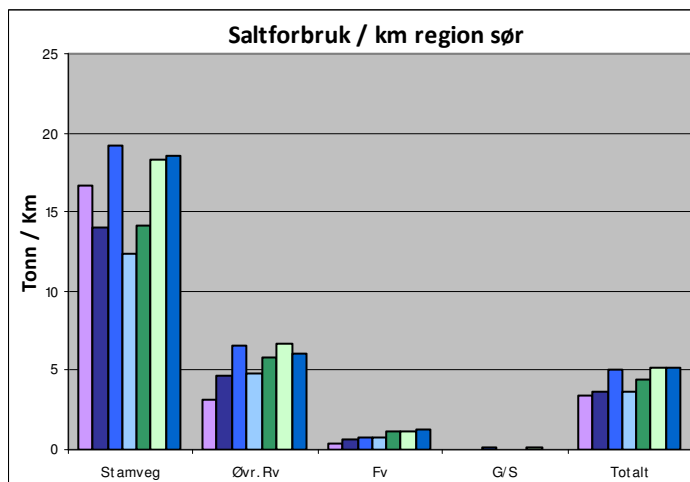
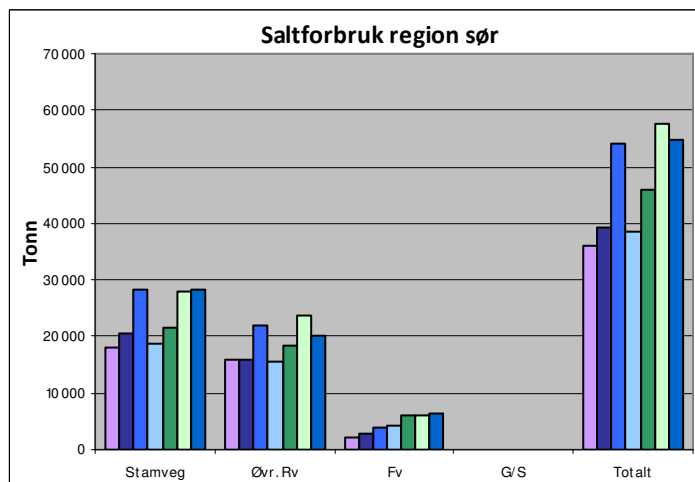
### Mengde per vegkategori region øst

(Vegkategorier for 2009 er brukt)



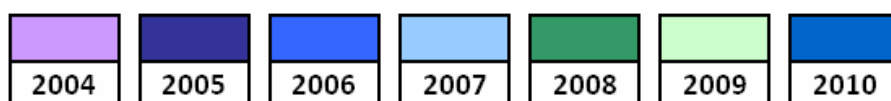
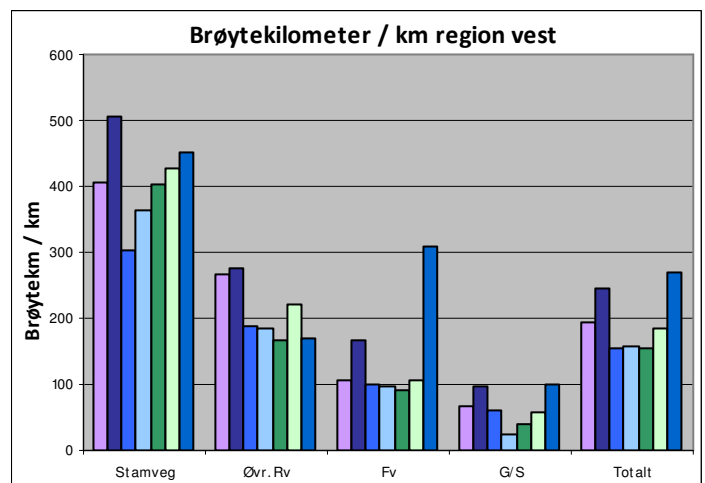
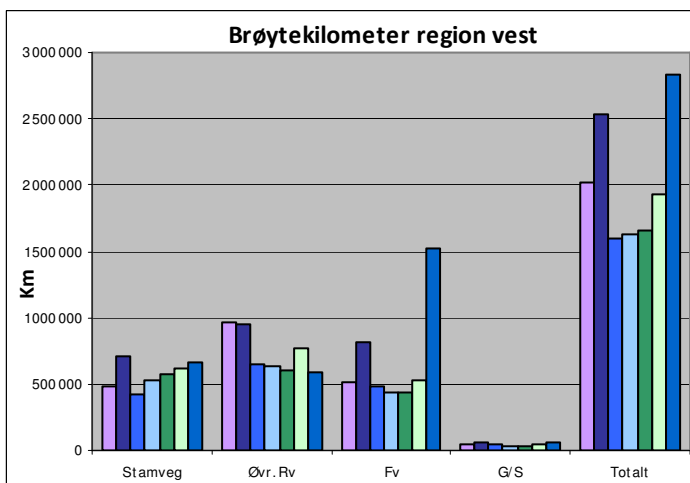
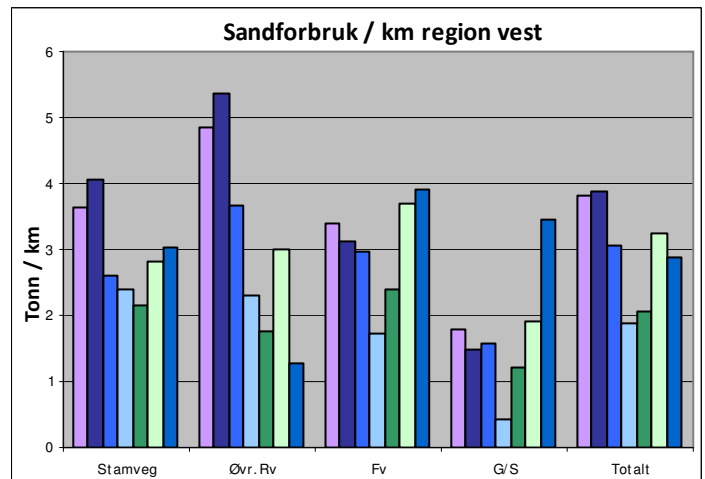
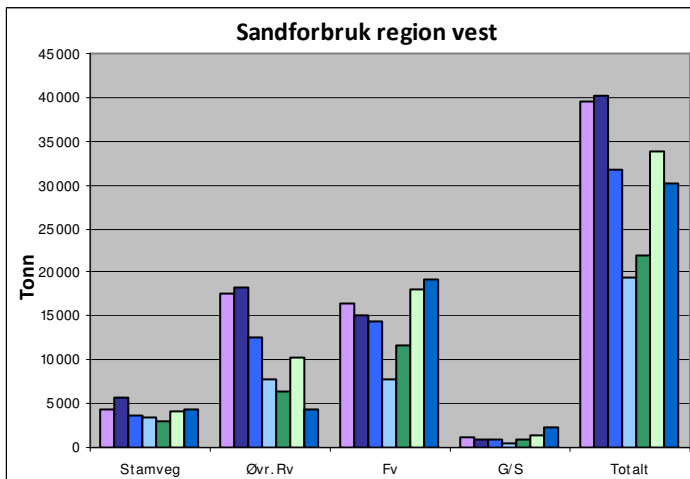
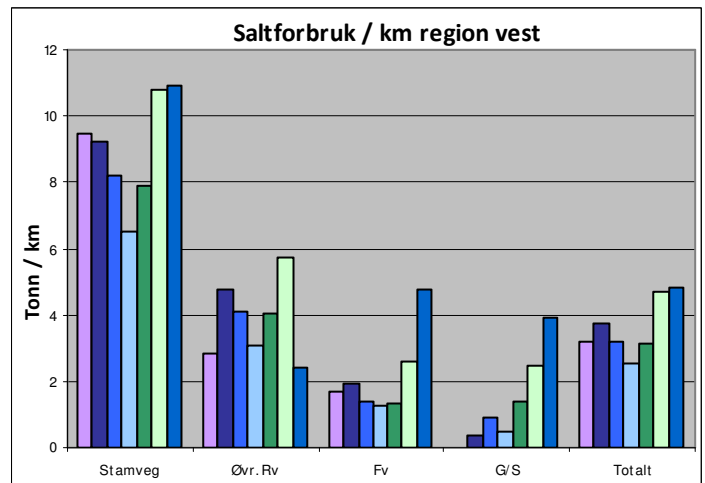
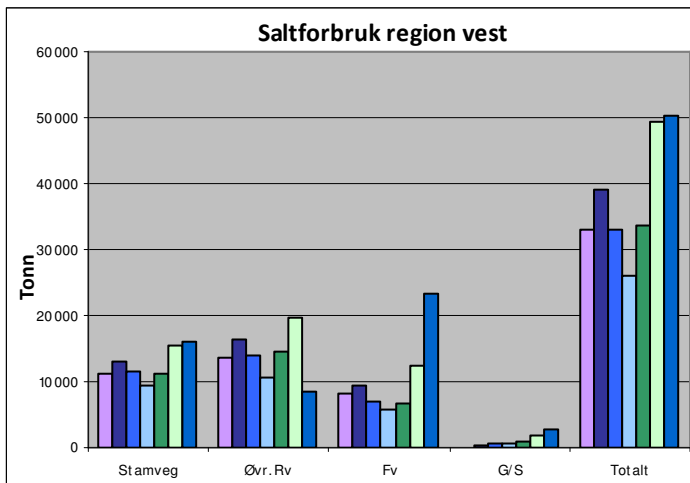
## Mengde per vegkategori region sør

(Vegkategorier for 2009 er brukt)

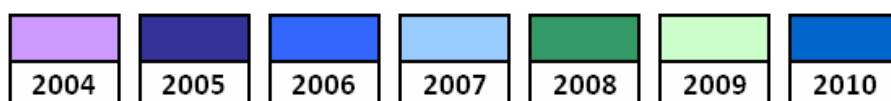
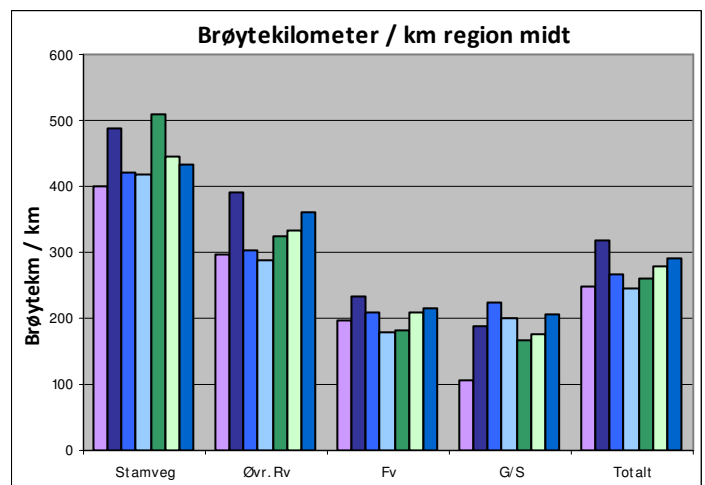
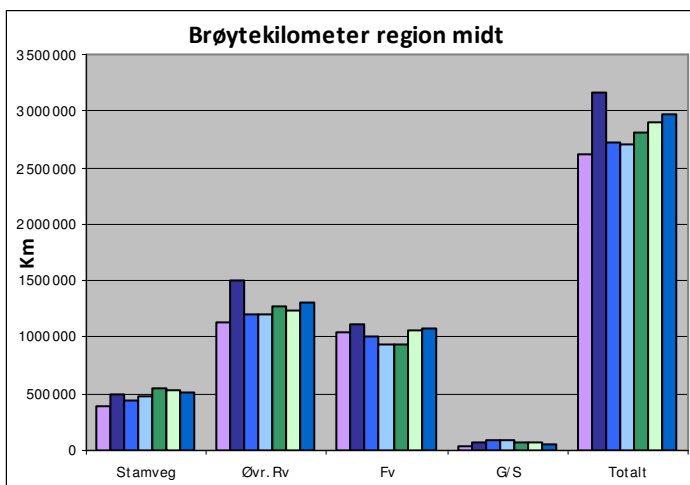
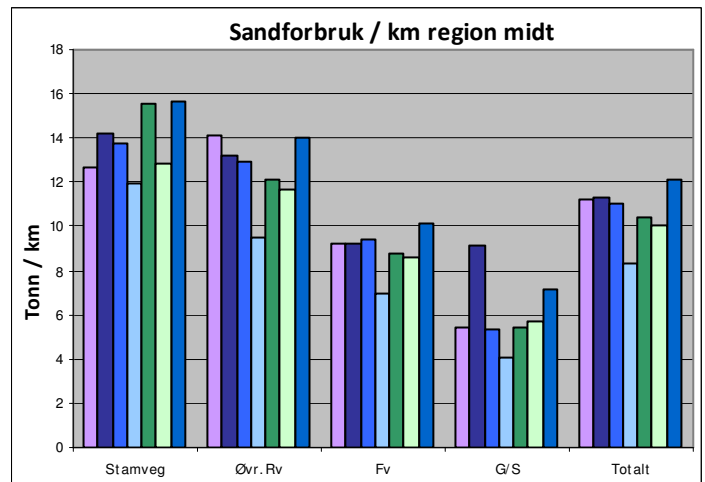
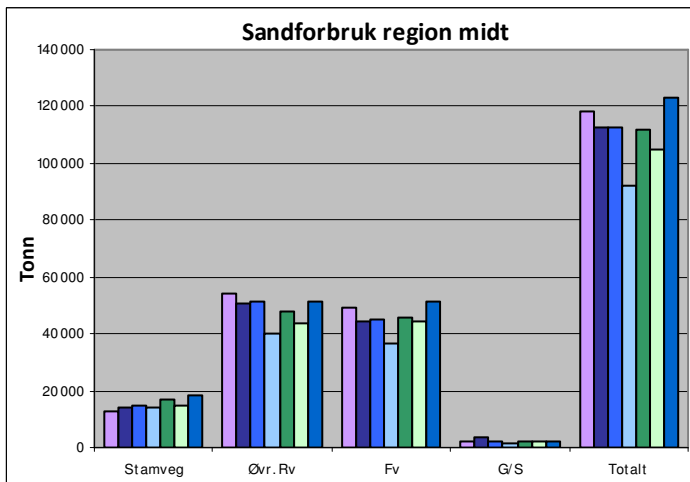
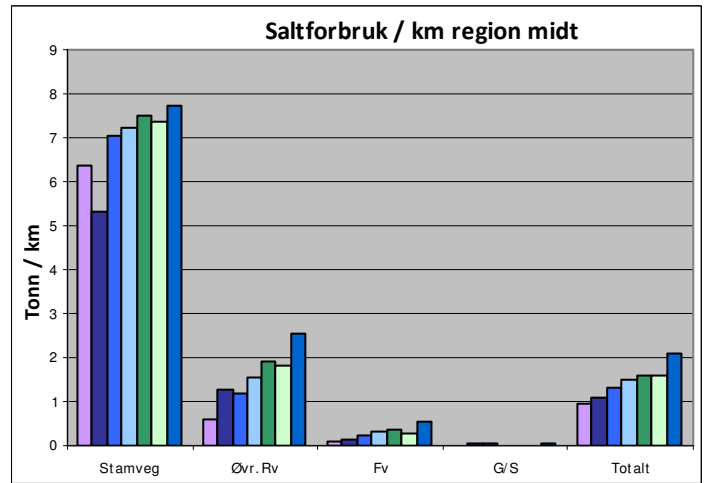
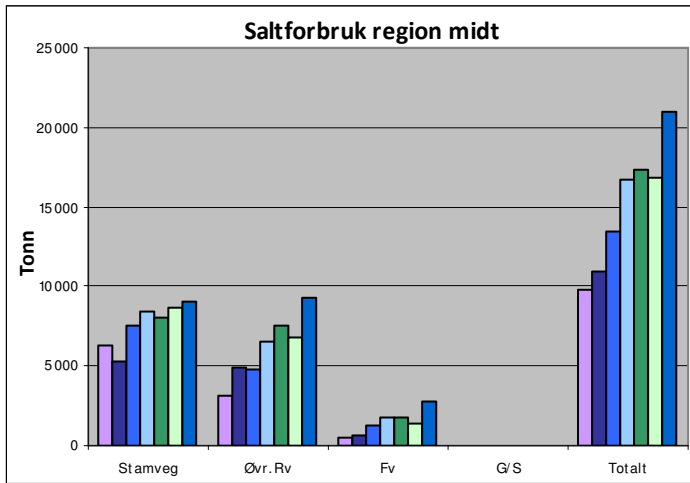


## Mengde per vegkategori region vest

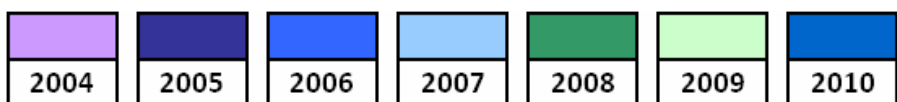
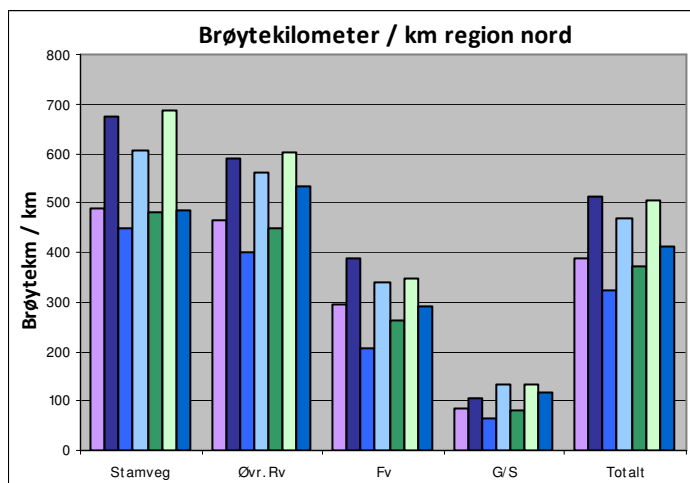
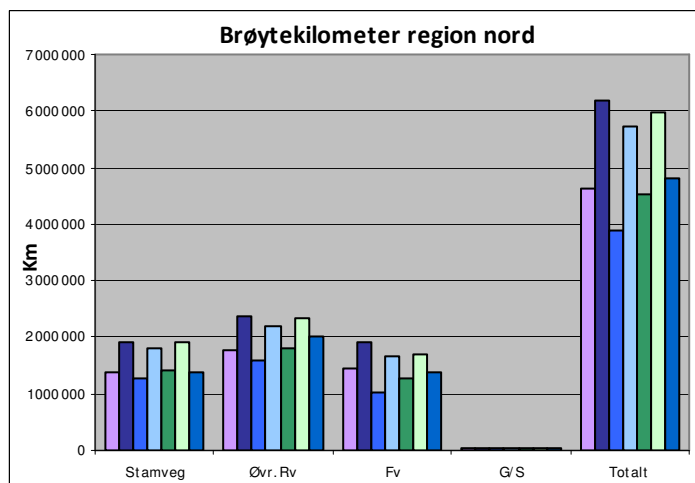
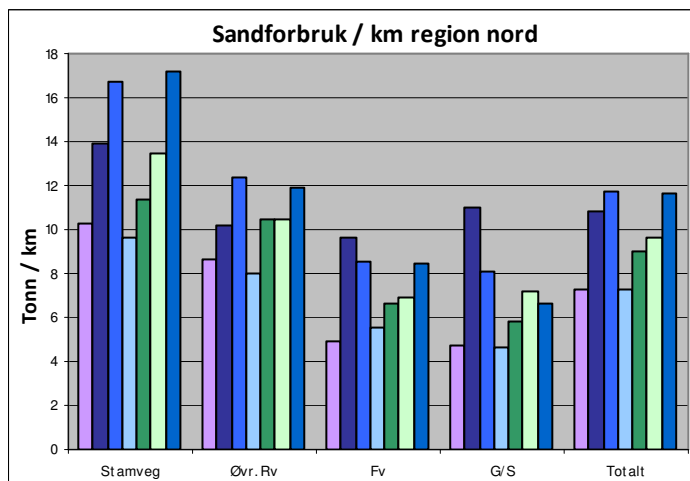
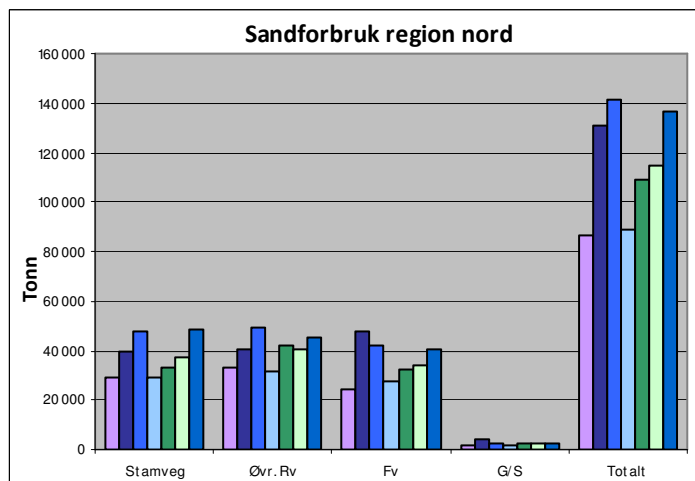
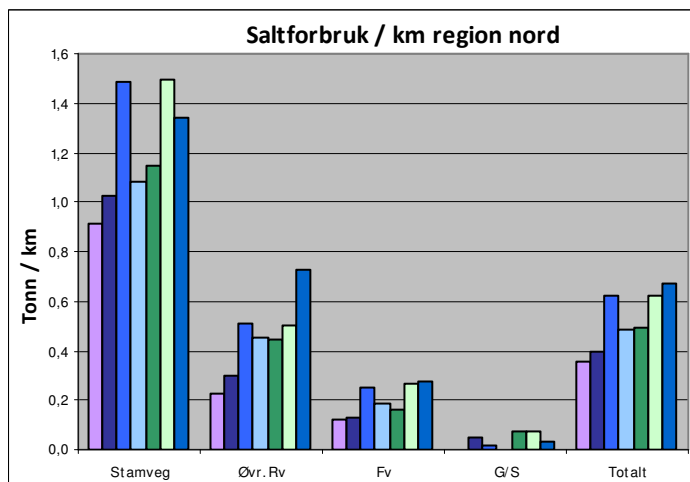
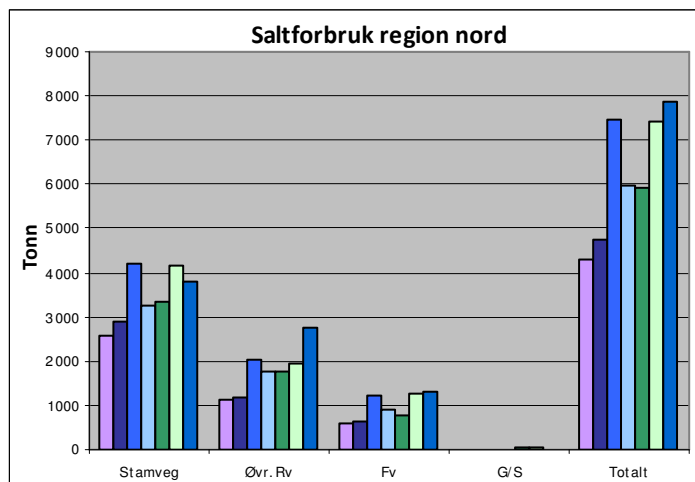
(Vegkategorier for 2009 er brukt)



## Menge per vegkategori region midt (Vegkategorier for 2009 er brukt)



## Menge per vegkategori region nord (Vegkategorier for 2009 er brukt)





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ISSN 1504-5005