



PLANO ESTRATÉGICO DE CASCAIS FACE ÀS

# ALTERAÇÕES CLIMÁTICAS

Cenários Socioeconómicos

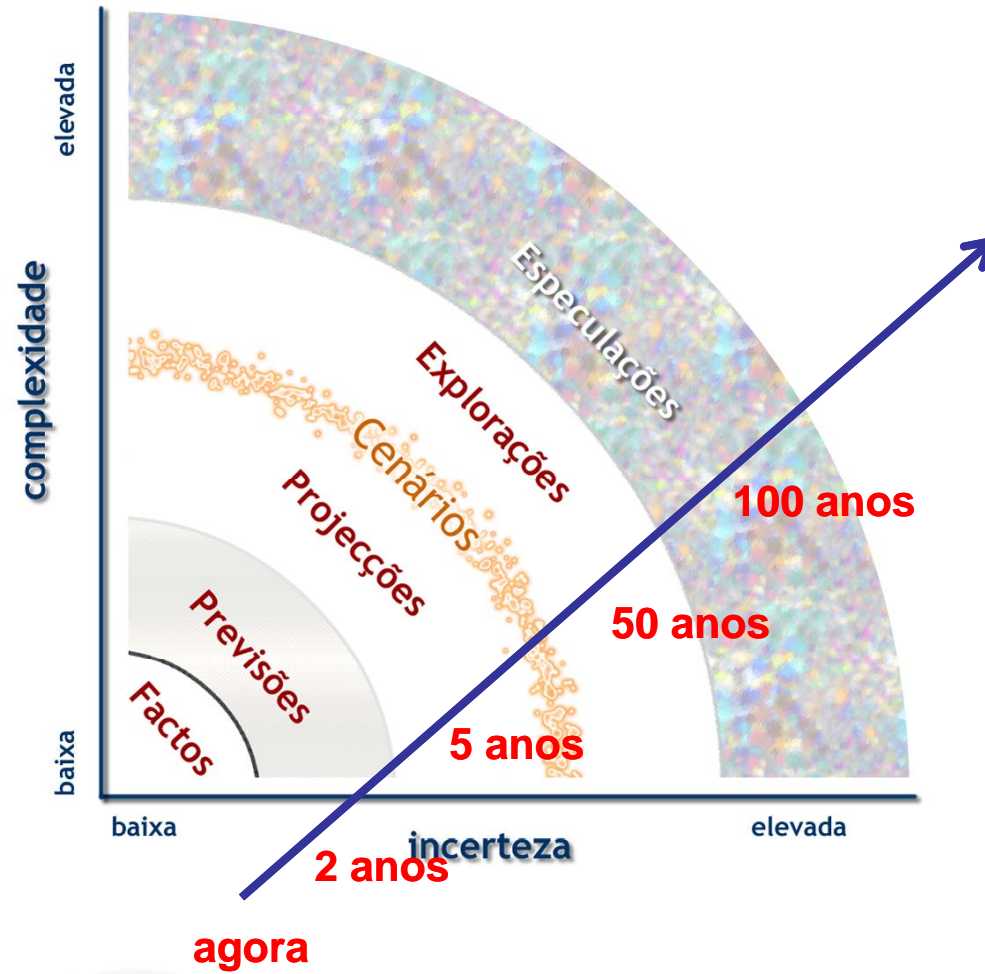
Laboratório Nacional de Energia e Geologia, I.P.

Ricardo Aguiar | Unidade de Análise Energética e Alterações Climáticas

<http://siam.fc.ul.pt/siam-cascais>

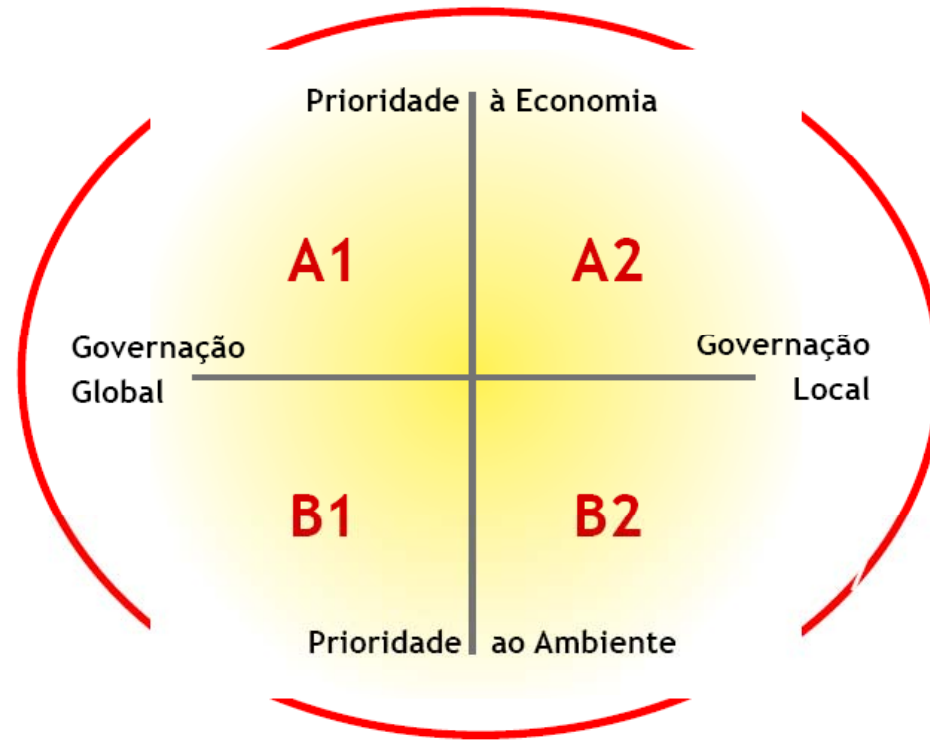


# Antevendo o Futuro





# Os Cenários SRES do IPCC



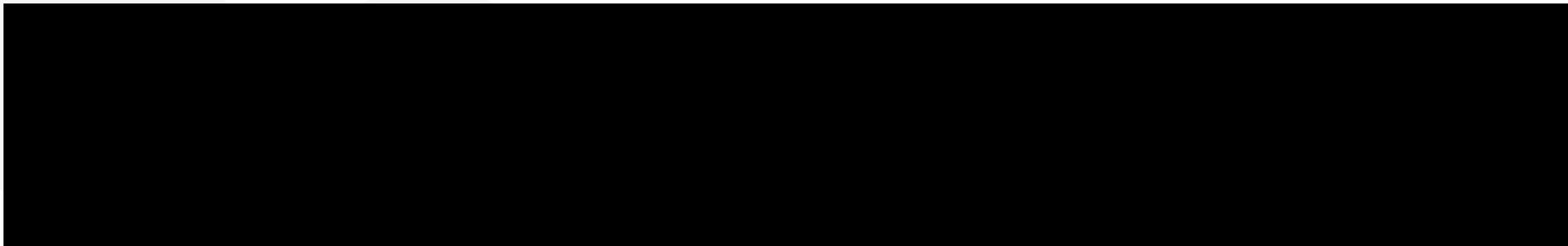
	População	Economia	Ambiente	Equidade	Tecnologia	Globalização	Emissões
A1	↗	↗	↘	↗	↗	↗	↗
A2	↗	↗	↘	↘	↗	↘	↗
B1	↗	↗	↗	↗	↗	↗	↗
B2	↗	↗	↗	↗	↗	↘	↗

# Demografia

Modelos demográficos detalhados até 2070 para as 4 variantes SRES

Zoom sucessivo : Europa > Portugal > AM Lisboa > Cascais

## Fecundidade



## Natalidade

Ano >>	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
Nascimentos															
15-19	110	112	107	97	88	96	88	90	86	77	67	60	58	59	60
20-24	285	328	288	267	239	213	235	215	220	212	190	166	150	146	149
25-29	620	532	588	503	459	409	371	405	374	385	374	337	296	271	265
30-34	666	593	648	713	622	583	538	499	562	537	570	569	528	478	451
35-39	325	339	353	400	463	432	426	412	401	472	475	531	559	547	523
40-44	74	80	88	89	96	107	97	95	91	88	101	101	111	115	112
45-49	4	4	4	4	4	5	6	5	5	5	4	5	5	6	6
Total nasc.	2 084	1 987	2 076	2 074	1 972	1 846	1 760	1 719	1 740	1 776	1 780	1 768	1 707	1 622	1 566
Total Fertilidade	1.70	1.62	1.75	1.81	1.77	1.68	1.62	1.62	1.68	1.77	1.81	1.86	1.87	1.84	1.81

crianças/  
mulher



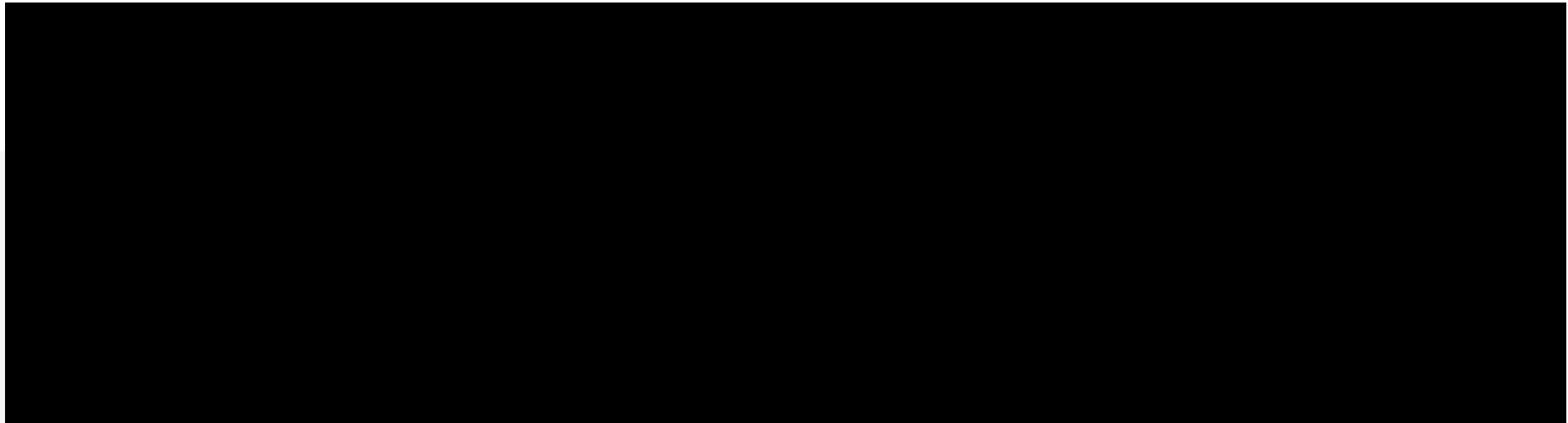
## Imigração internacional

Ano >>	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
<b>Migrantes internacionais</b>															
0-4	36	34	19	11	6	3	2	1	1	0	0	0	0	0	0
5-9	52	48	27	15	9	5	3	1	1	0	0	0	0	0	0
10-14	74	68	39	22	12	7	4	2	1	1	0	0	0	0	0
15-19	106	98	56	32	18	10	5	3	2	1	0	0	0	0	0
20-24	152	140	80	45	25	14	8	4	2	1	1	0	0	0	0
25-29	217	200	114	64	36	20	11	6	3	2	1	0	0	0	0
30-34	310	285	162	92	52	29	16	9	5	3	1	1	0	0	0
35-39	217	200	114	64	36	20	11	6	3	2	1	0	0	0	0
40-44	152	140	80	45	25	14	8	4	2	1	1	0	0	0	0
45-49	106	98	56	32	18	10	5	3	2	1	0	0	0	0	0
50-54	74	68	39	22	12	7	4	2	1	1	0	0	0	0	0
55-59	52	48	27	15	9	5	3	1	1	0	0	0	0	0	0
60-64	36	34	19	11	6	3	2	1	1	0	0	0	0	0	0
65-69	26	23	13	8	4	2	1	1	0	0	0	0	0	0	0
70-74	18	16	9	5	3	2	1	1	0	0	0	0	0	0	0
75-79	13	12	7	4	2	1	1	0	0	0	0	0	0	0	0
80-84	9	8	5	3	1	1	0	0	0	0	0	0	0	0	0
85+	6	6	3	2	1	1	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1 658</b>	<b>1 525</b>	<b>868</b>	<b>491</b>	<b>276</b>	<b>154</b>	<b>86</b>	<b>47</b>	<b>25</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>0</b>

## Atractividade no contexto da AM Lisboa

Ano >>	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
0-4	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
5-9	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
10-14	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
15-19	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
20-24	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
25-29	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
30-34	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
35-39	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
40-44	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
45-49	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
50-54	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
55-59	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
60-64	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
65-69	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
70-74	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
75-79	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
80-84	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
85+	↗	↗	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
<b>Total</b>	<b>794</b>	<b>740</b>	<b>507</b>	<b>297</b>	<b>120</b>	<b>-28</b>	<b>-153</b>	<b>-99</b>	<b>-62</b>	<b>-40</b>	<b>-24</b>	<b>-10</b>	<b>3</b>	<b>13</b>	<b>21</b>

## Mortalidade

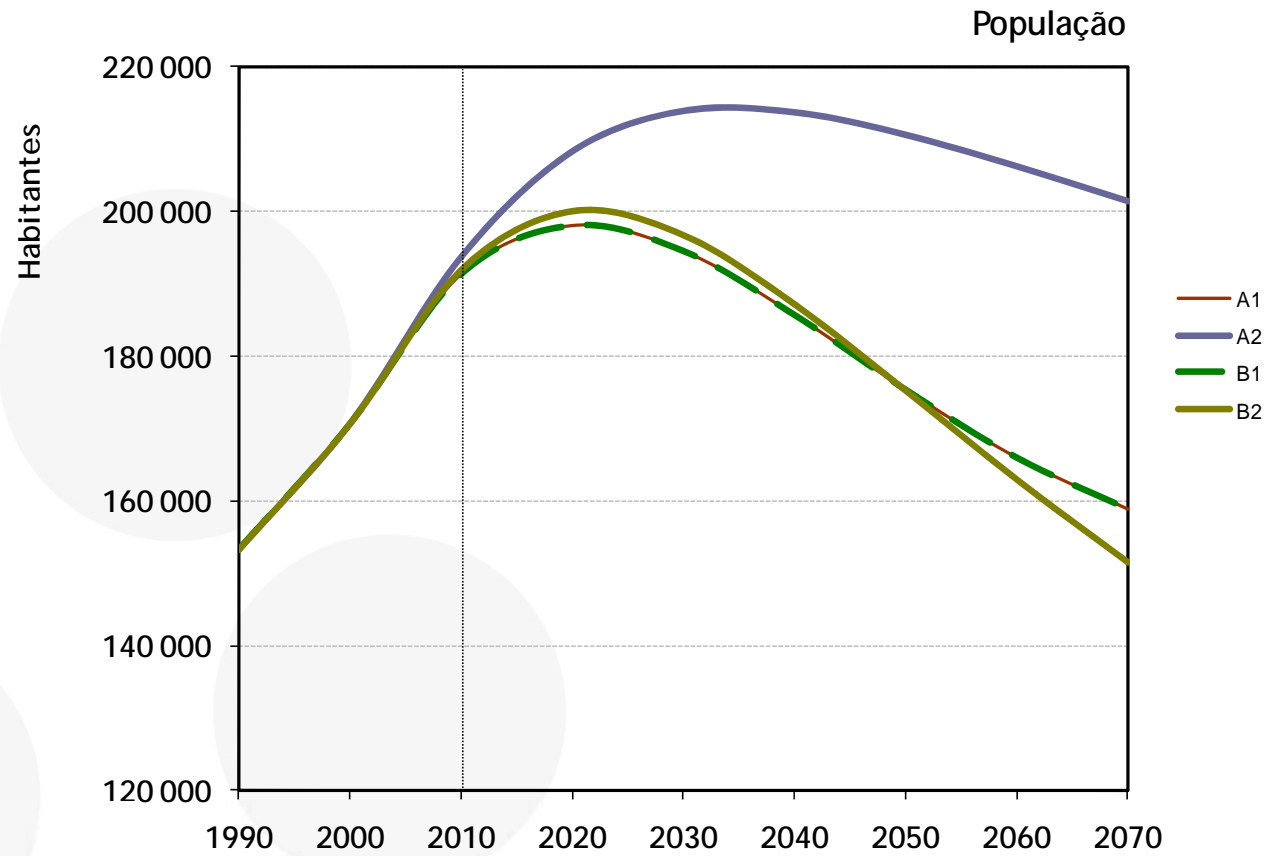


## População

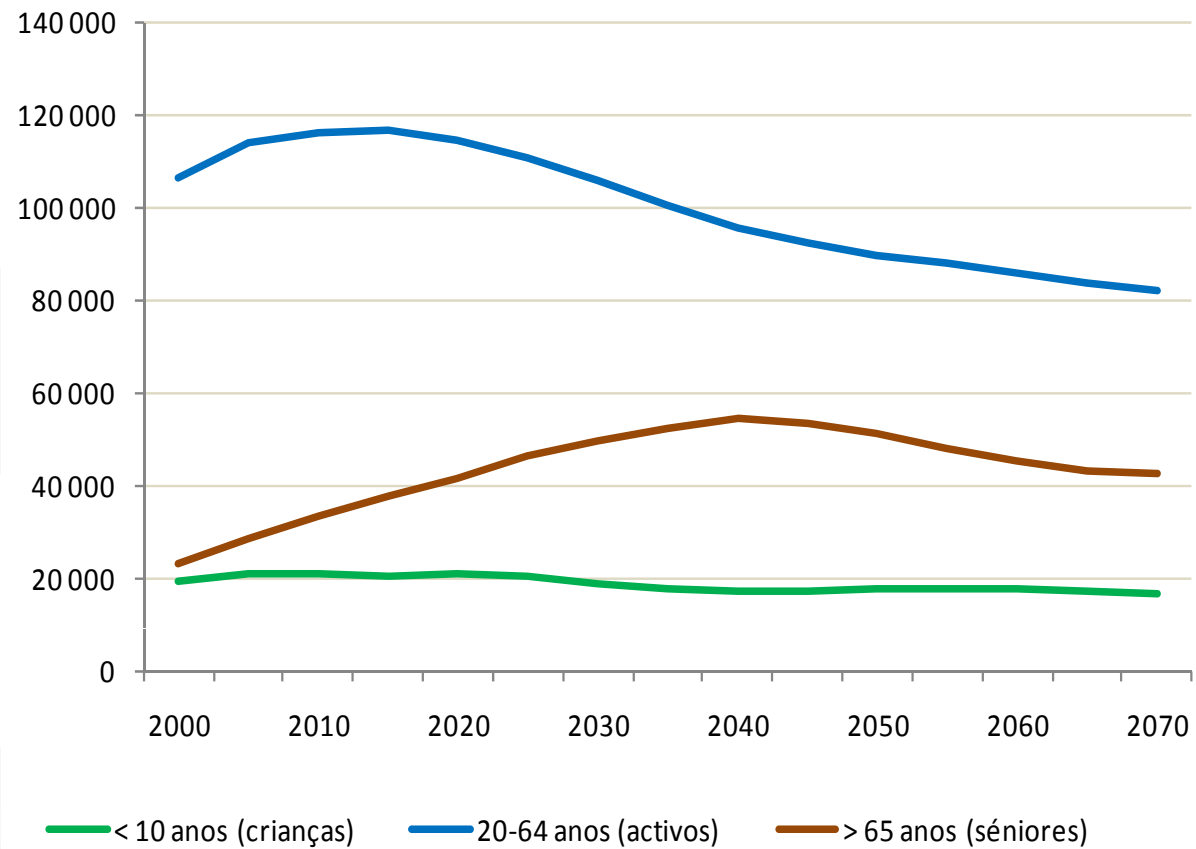
Ano >>	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
População	<b>Census</b>	Cenário >>>													
0-4	9 900	10 719	10 099	10 450	10 371	9 815	9 157	8 742	8 548	8 659	8 854	8 884	8 833	8 536	8 117
5-9	9 600	10 177	10 887	10 158	10 429	10 297	9 713	9 076	8 676	8 495	8 616	8 823	8 864	8 822	8 532
10-14	8 500	10 040	10 428	11 012	10 186	10 388	10 212	9 650	9 030	8 643	8 471	8 602	8 818	8 866	8 830
15-19	9 000	9 092	10 372	10 597	11 065	10 160	10 303	10 144	9 601	8 997	8 620	8 457	8 596	8 820	8 874
20-24	9 800	10 084	9 723	10 736	10 787	11 124	10 112	10 255	10 104	9 572	8 977	8 607	8 449	8 593	8 821
25-29	12 400	11 335	10 956	10 198	10 973	10 865	11 068	10 057	10 202	10 062	9 542	8 956	8 593	8 441	8 590
30-34	13 400	14 331	12 498	11 574	10 503	11 088	10 851	11 022	10 011	10 160	10 028	9 518	8 940	8 582	8 435
35-39	13 650	14 438	14 913	12 774	11 665	10 493	11 006	10 763	10 928	9 938	10 100	9 984	9 487	8 919	8 569
40-44	14 000	14 378	14 827	15 069	12 783	11 593	10 379	10 899	10 667	10 837	9 869	10 046	9 944	9 460	8 901
45-49	12 400	14 463	14 586	14 853	14 962	12 609	11 398	10 228	10 765	10 550	10 730	9 788	9 980	9 892	9 420
50-54	11 520	12 670	14 504	14 494	14 663	14 690	12 319	11 179	10 060	10 613	10 418	10 610	9 695	9 900	9 825
55-59	10 250	11 632	12 588	14 283	14 205	14 317	14 286	12 003	10 934	9 866	10 434	10 261	10 466	9 579	9 796
60-64	9 000	10 365	11 616	12 475	14 085	13 989	14 085	14 066	11 825	10 760	9 705	10 262	10 096	10 304	9 434
65-69	8 300	8 881	10 194	11 374	12 170	13 706	13 611	13 714	13 713	11 539	10 497	9 471	10 019	9 864	10 076
70-74	8 300	7 885	8 441	9 661	10 773	11 518	12 971	12 908	13 032	13 062	11 013	10 028	9 062	9 601	9 468
75-79	4 200	7 259	7 116	7 620	8 732	9 760	10 456	11 811	11 799	11 955	12 028	10 177	9 291	8 420	8 946
80-84	2 100	3 215	5 628	5 566	5 996	6 914	7 779	8 391	9 542	9 602	9 796	9 924	8 451	7 760	7 073
85+	450	1 239	2 015	3 554	3 767	4 153	4 879	5 651	6 298	7 301	7 688	8 065	8 404	7 647	7 155
Total	166 770	182 203	191 392	196 447	198 114	197 480	194 587	190 559	185 736	180 609	175 387	170 463	165 987	162 006	158 861
variação		1.9%	1.0%	0.5%	0.2%	-0.1%	-0.3%	-0.4%	-0.5%	-0.6%	-0.6%	-0.6%	-0.5%	-0.5%	-0.4%

por ano

# Demografia População



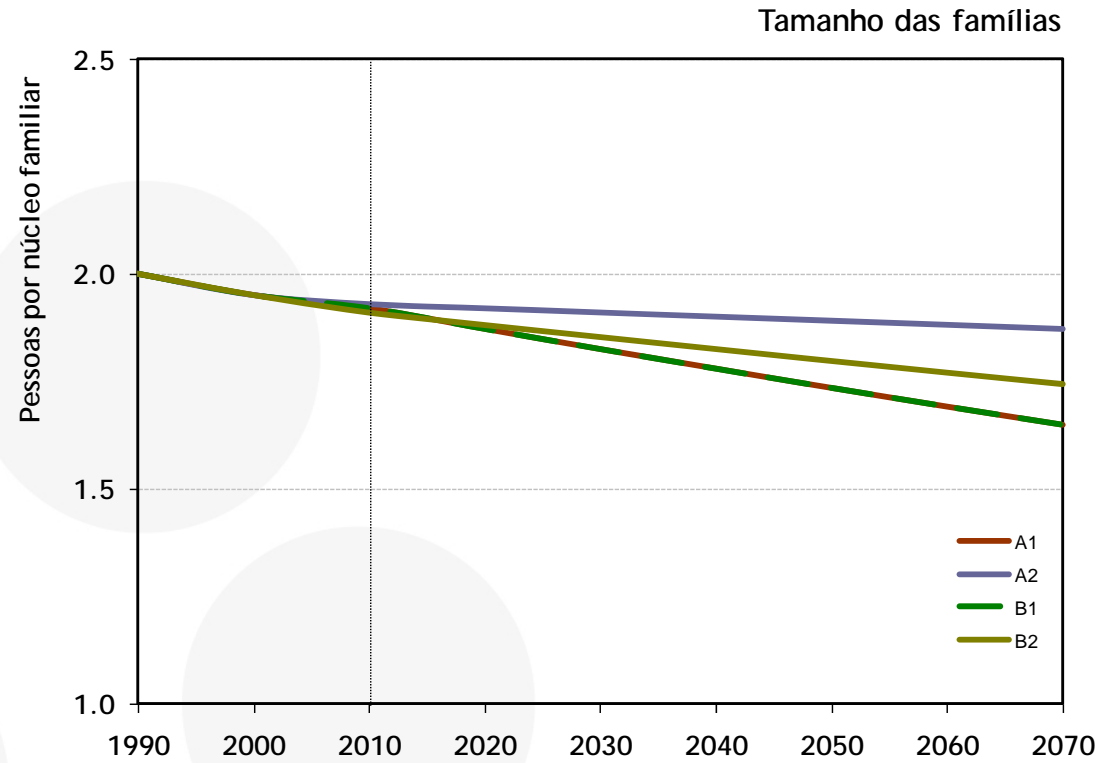
## Demografia Grupos de idade





# Demografia

## Tamanho das famílias



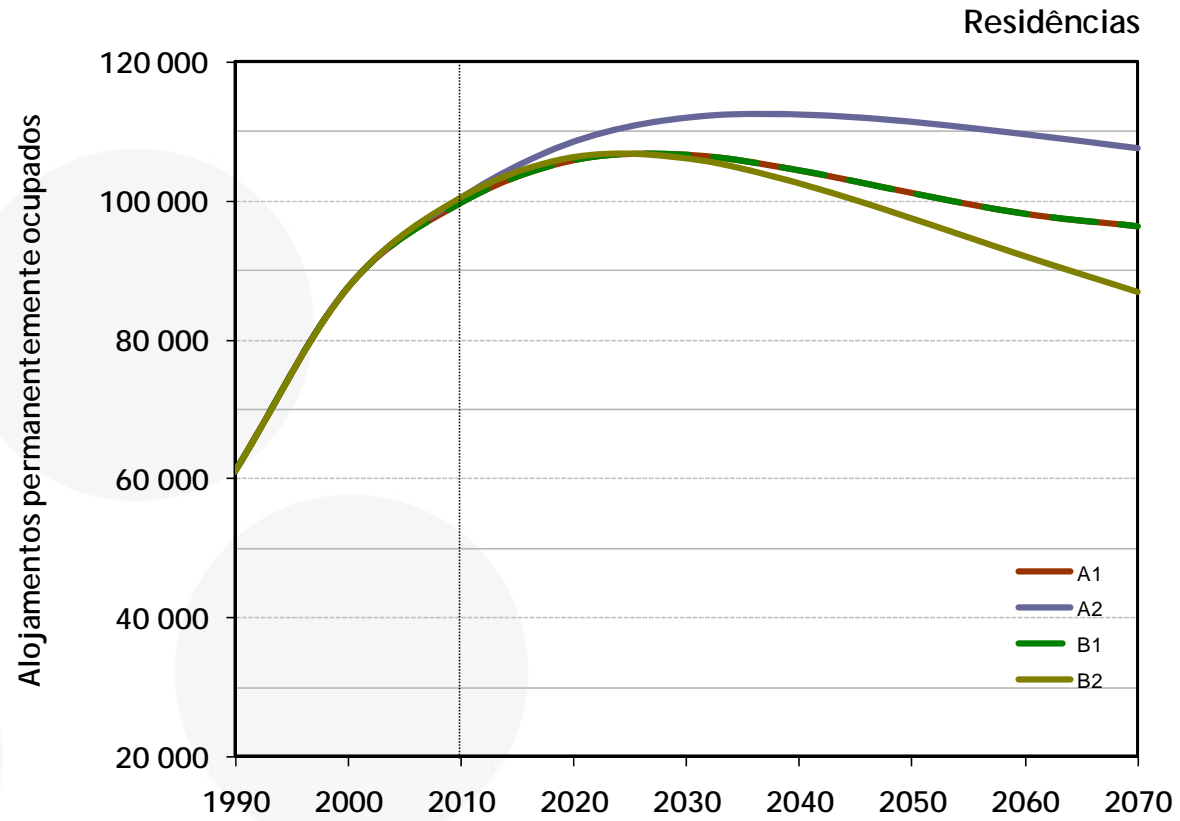
Modelos de complexidade semelhante para a **actividade** nos vários sectores, e incluindo também a evolução da **tecnologia**:

- actividade económica geral
- sector residencial
- sector de serviços
- transportes
- procura de água
- agricultura
- resíduos / efluentes

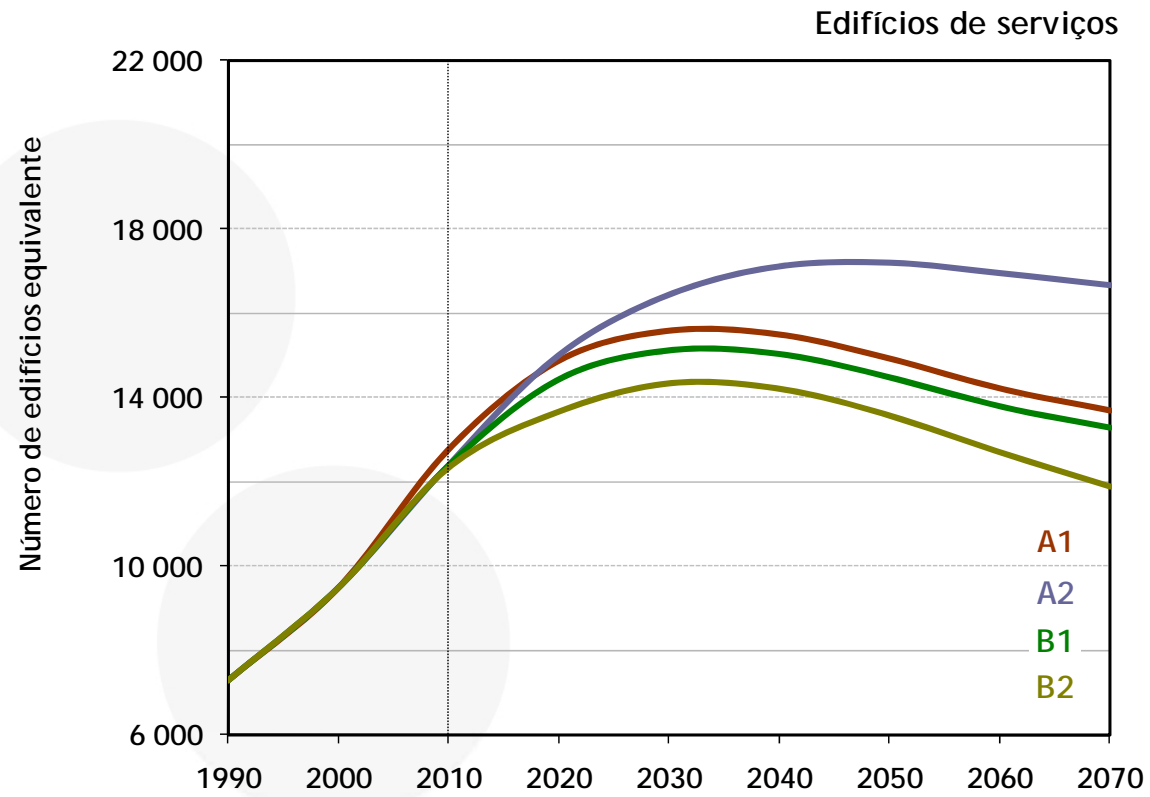
sempre para os 4 cenários SRES.

# Edifícios

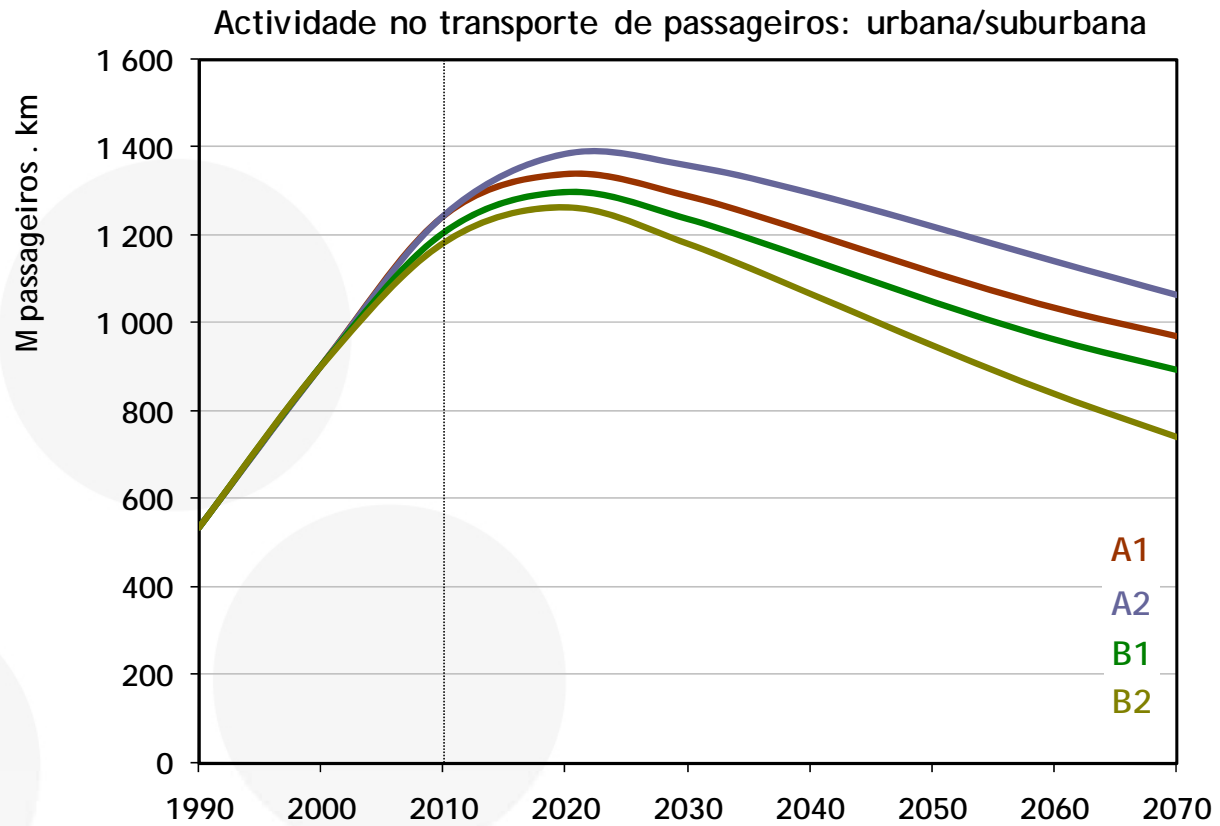
## Sector residencial



# Edifícios Sector de Serviços

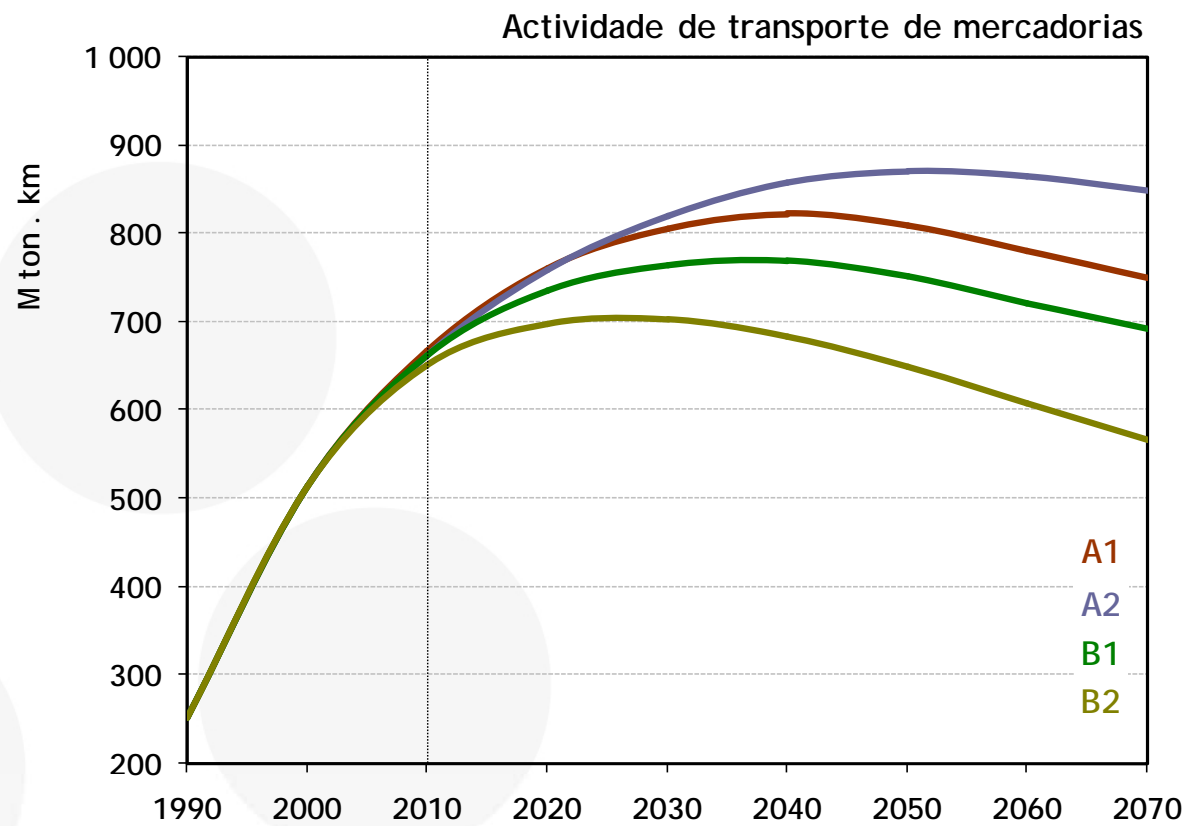


# Transportes Passageiros

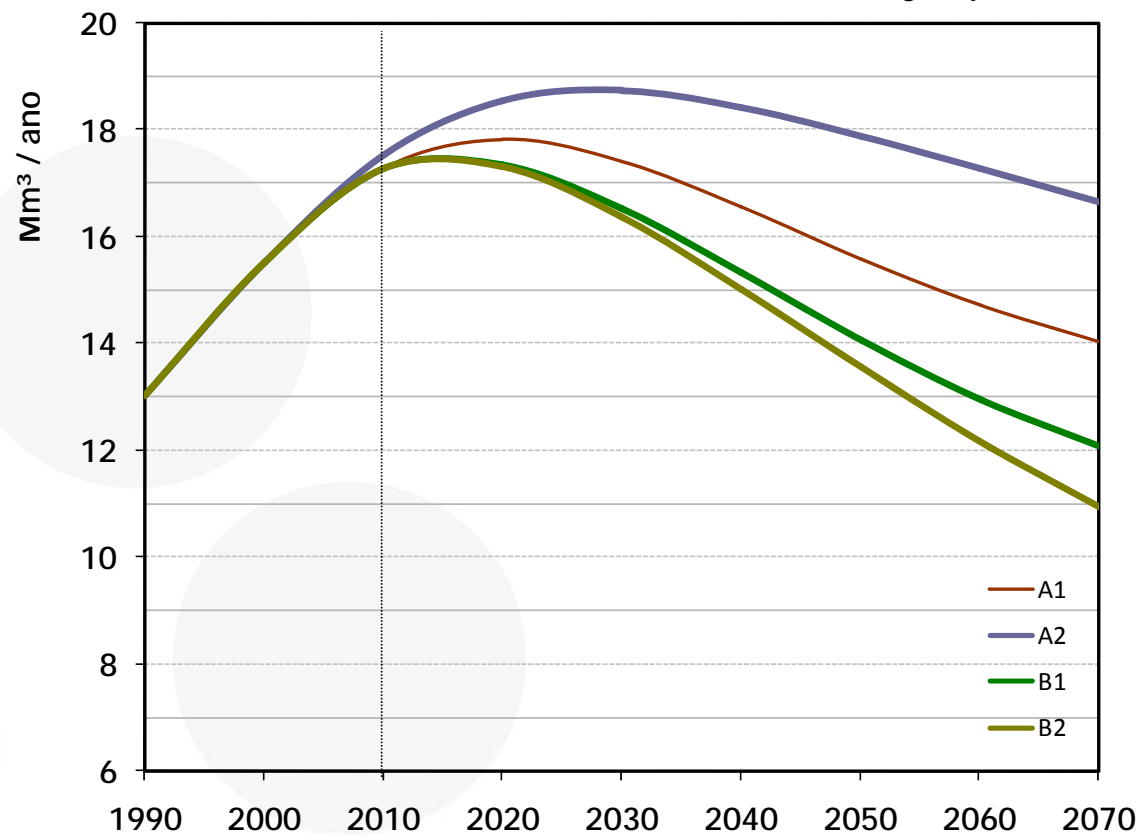




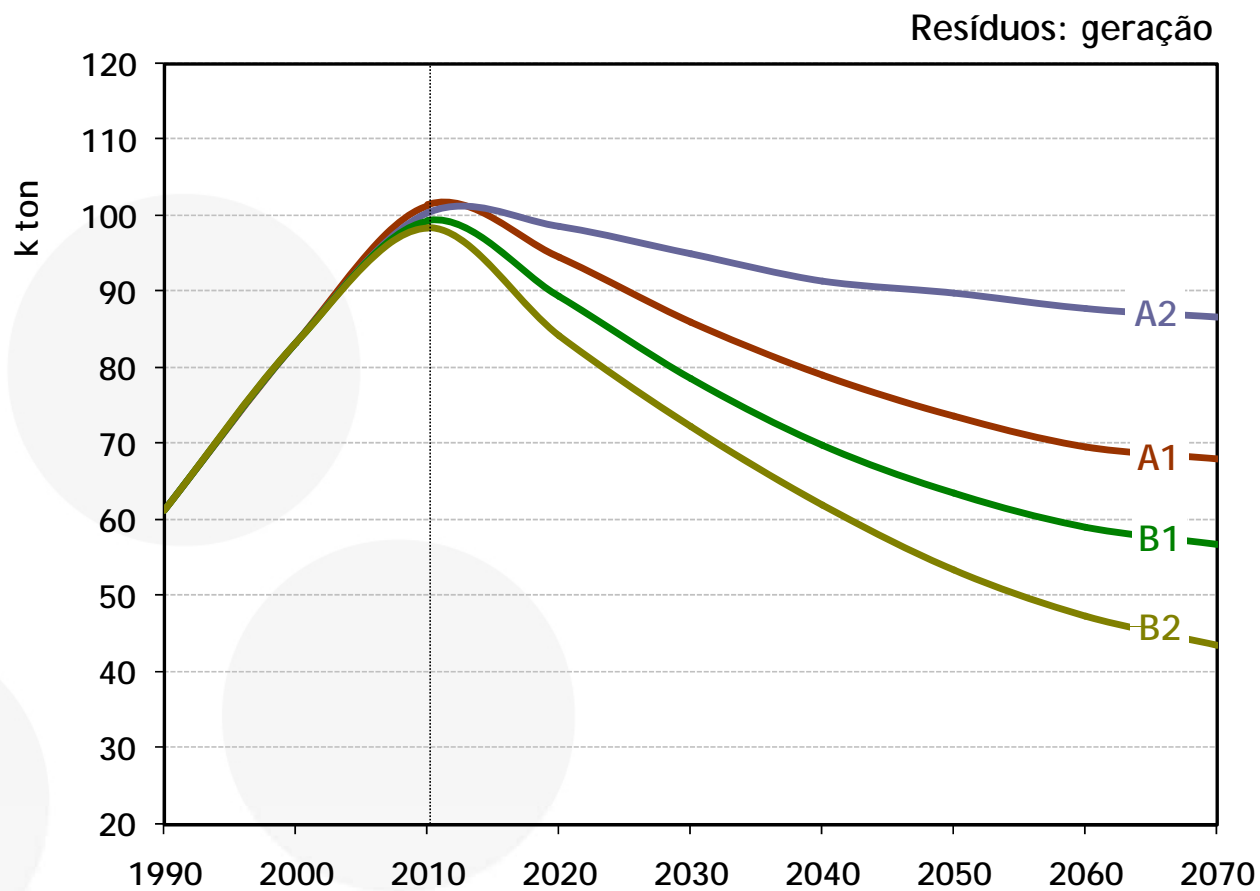
# Transportes Mercadorias



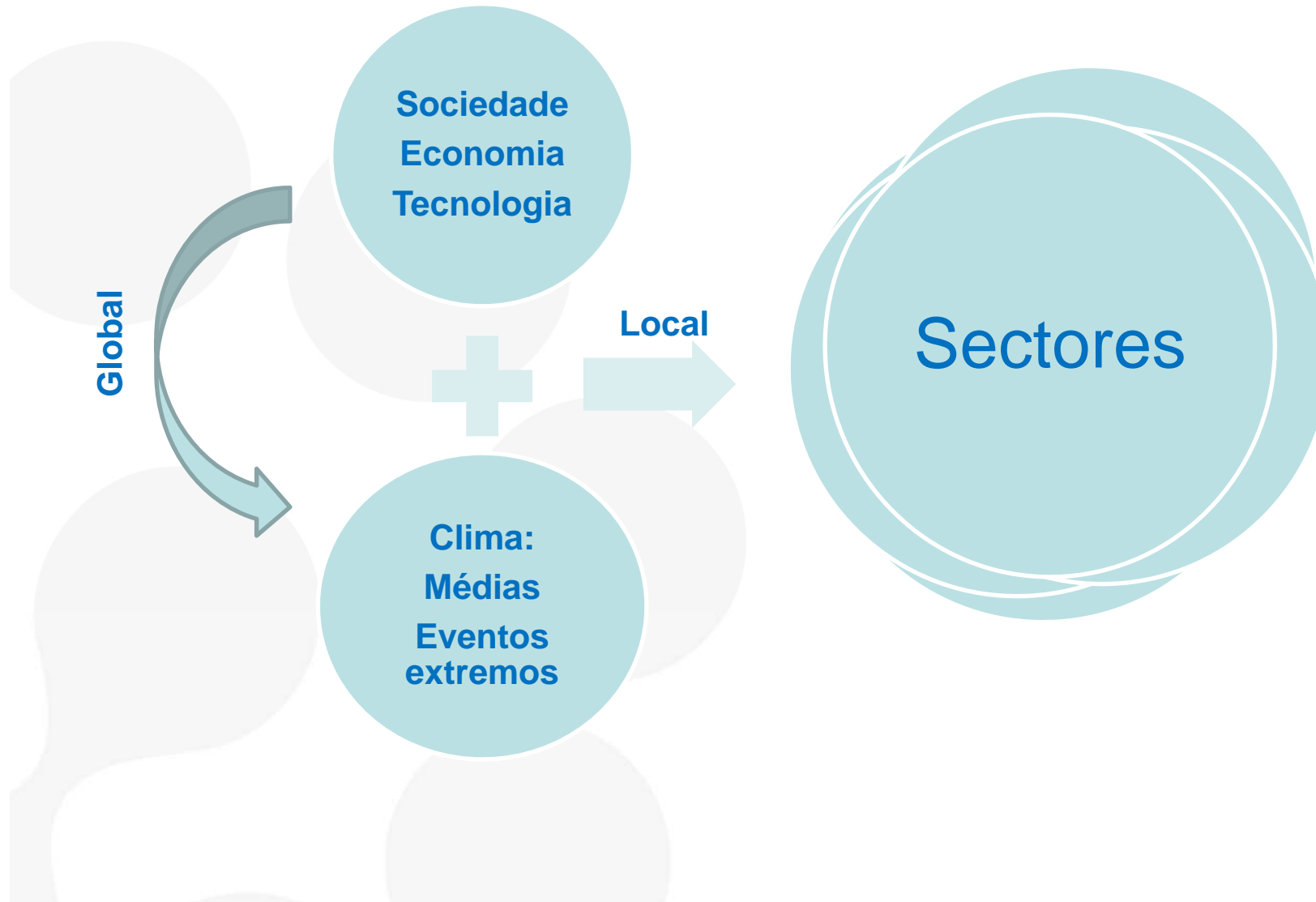
Procura de água potável



# Outros Resíduos



## Utilização dos Cenários





**meid** Ministério da Economia,  
da Inovação e do Desenvolvimento

LNEG - Laboratório Nacional de Energia e Geologia, I.P.

[www.lneg.pt](http://www.lneg.pt)