



2017 ANNUAL POLIS CONFERENCE

6-7 December 2017, Brussels

Innovation in Transport for Sustainable Cities and Regions



Green Parking Index in the City of Stockholm

Eva Sunnerstedt
City of Stockholm
GrowSmarter



The Capital of Scandinavia

Parking requirements in Stockholm

Parking within properties are defined in Swedish law during the planning process of an area

...”reasonable space for parking should be provided...”



P-requirements have varied....

- One parking place/apartment (2007-2011)
- P- req Södra station, 1980-tal
 - 0,28 p-place/apartment
 - 5 pp/1000 m2 BTA
- Royal Sea Port Area P-req
 - 0,5 pp/apartment
 - Offices 0-4 pp/1000 m2 BTA
 - Commercial 0-6 pp/1000 m2 BTA

Green Parking Index

- Produced by a working group with representation from Development Administration, Planning administration and Traffic Administration
- Decided by the City Council on Oct 19, 2015
- For residential buildings – not student housing
- Specific p-req according to the circumstances at the site (access to PT, other services etc)
- Offers the developer to get reduction on the p-req if mobility services are provided i.e car-sharing, good bicycle parking facilities – Green Parking Index



Established parking facilities – Stockholm developments

Area	No of apartments	No of parking places	Parking place/apartm ent
Suburbs	12 078	7 811	0,65
Inner City	8 462	3 895	0,46
Total	20 540	11 706	0,57

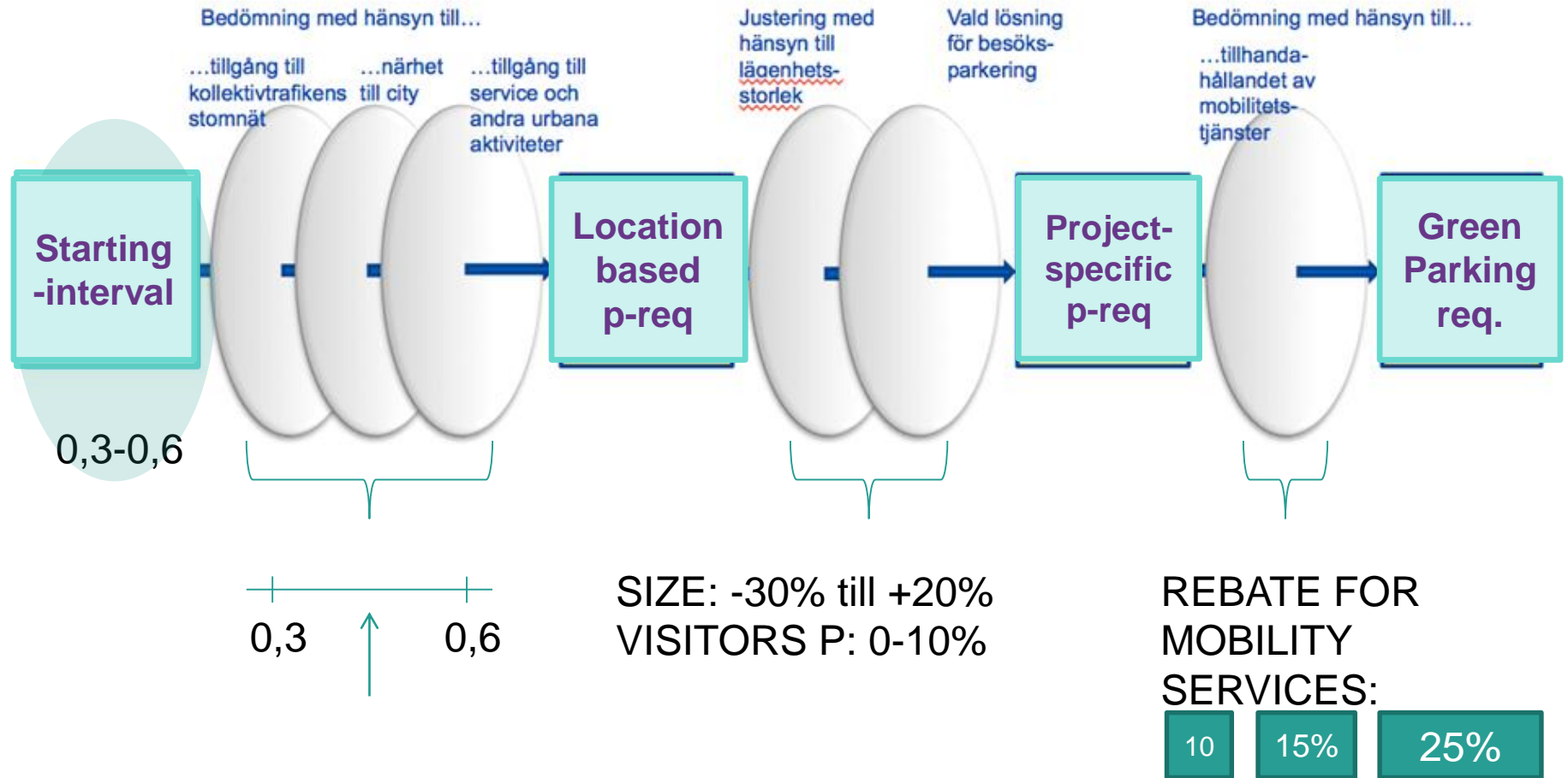


Prerequisites

- No "correct" p-req - scientifically
- Best knowledge exists in real life at the developers and city authorities working in the field
- The index has been constructed to make sure that every development is treated in the same way – the process becomes clear and transparent for every one involved
- The index need to be reasonable with respect to car ownership and the goals for the city in the future
- Political ambitions – possible to build cheaper apartments for renting and a climate smart city
- *"The index shall make it possible to achieve less car dependency in new housing developments"*



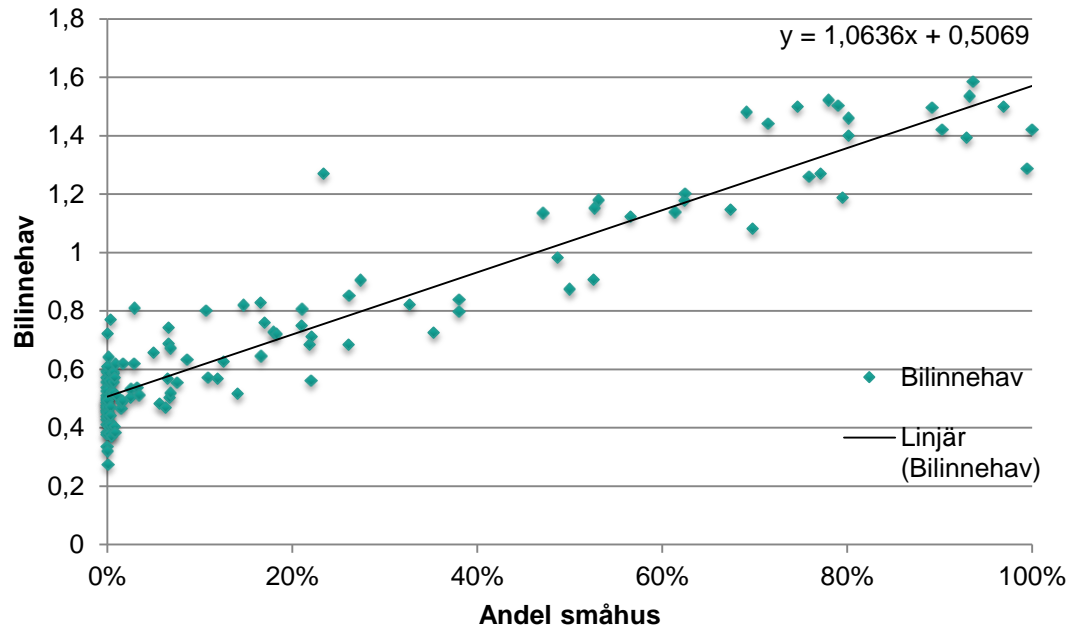
A dialog process



Car ownership is one initial concern

Starting
-interval

Car ownership in relation to share of single family homes



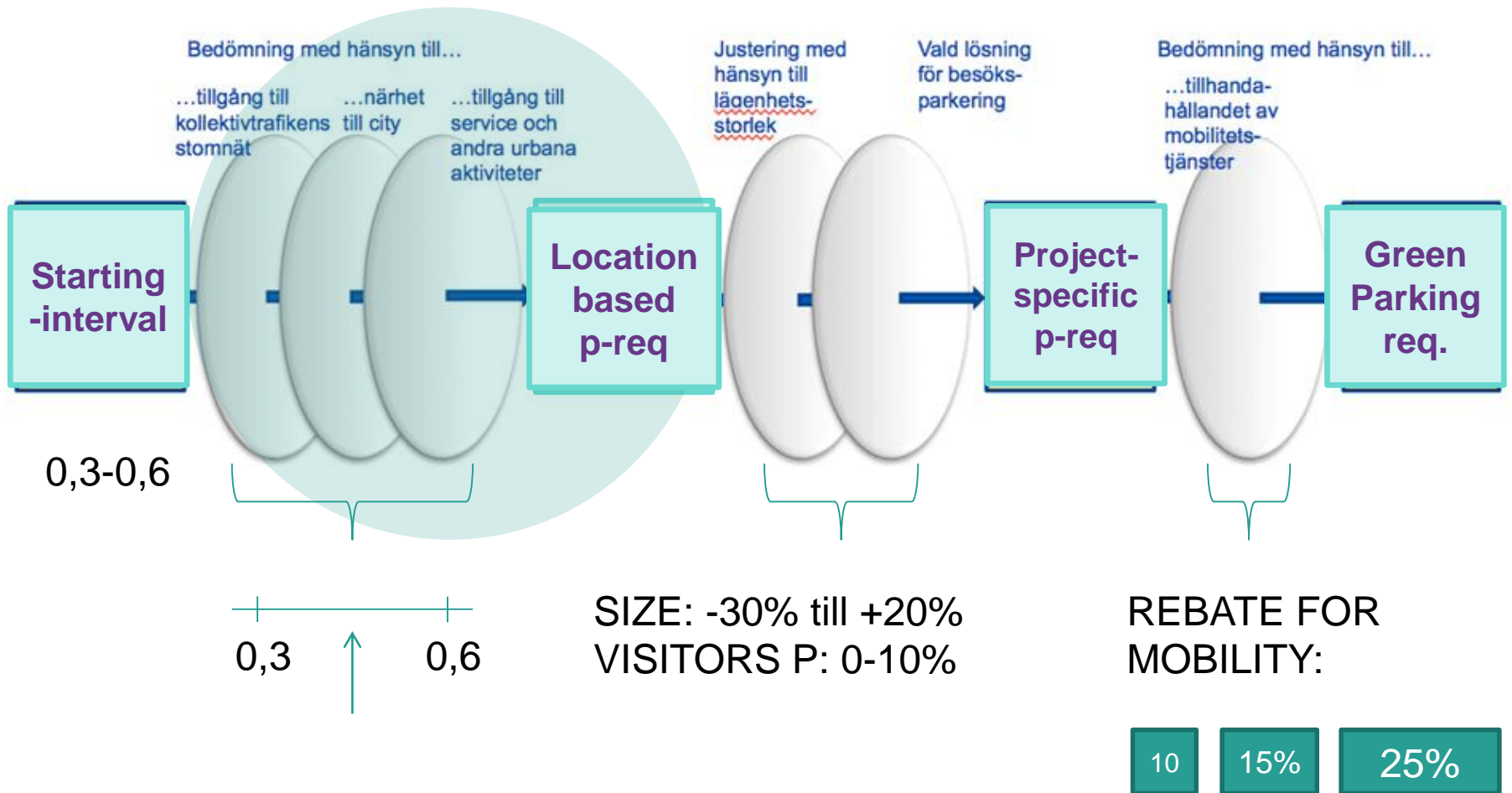
Green Parking Index

Starting
-interval

Area	Total no of cars	No of living units	No of single family homes	Share of single family homes	Adjusted car ownership
Rinkeby-Kista	11 066	19 942	1 391	7%	0,49
Spånga-Tensta	12 438	13 733	4 423	32%	0,58
Hässelby-Vällingby	26 345	30 386	9 857	32%	0,54
Bromma	26 089	34 721	7 948	22%	0,52
Kungsholmen	18 058	41 141	324	1%	0,43
Norrmalm	18 125	39 778	8	0	0,46
Östermalm	20 888	41 381	154	0	0,50
Södermalm	30 493	72 099	78	0	0,42
Enskede-Årsta-Vantör	28 745	46 874	4 960	11%	0,51
Skarpnäck	12 222	22 923	2 086	9%	0,44
Farsta	16 741	26 381	4 530	17%	0,46
Älvsjö	10 582	11 201	4 357	39%	0,56
Hägersten-Liljeholmen	23 709	41 910	2 804	7%	0,50
Skärholmen	9 596	14 020	2 042	15%	0,54

0,3-0,6

The dialog process



Dialog

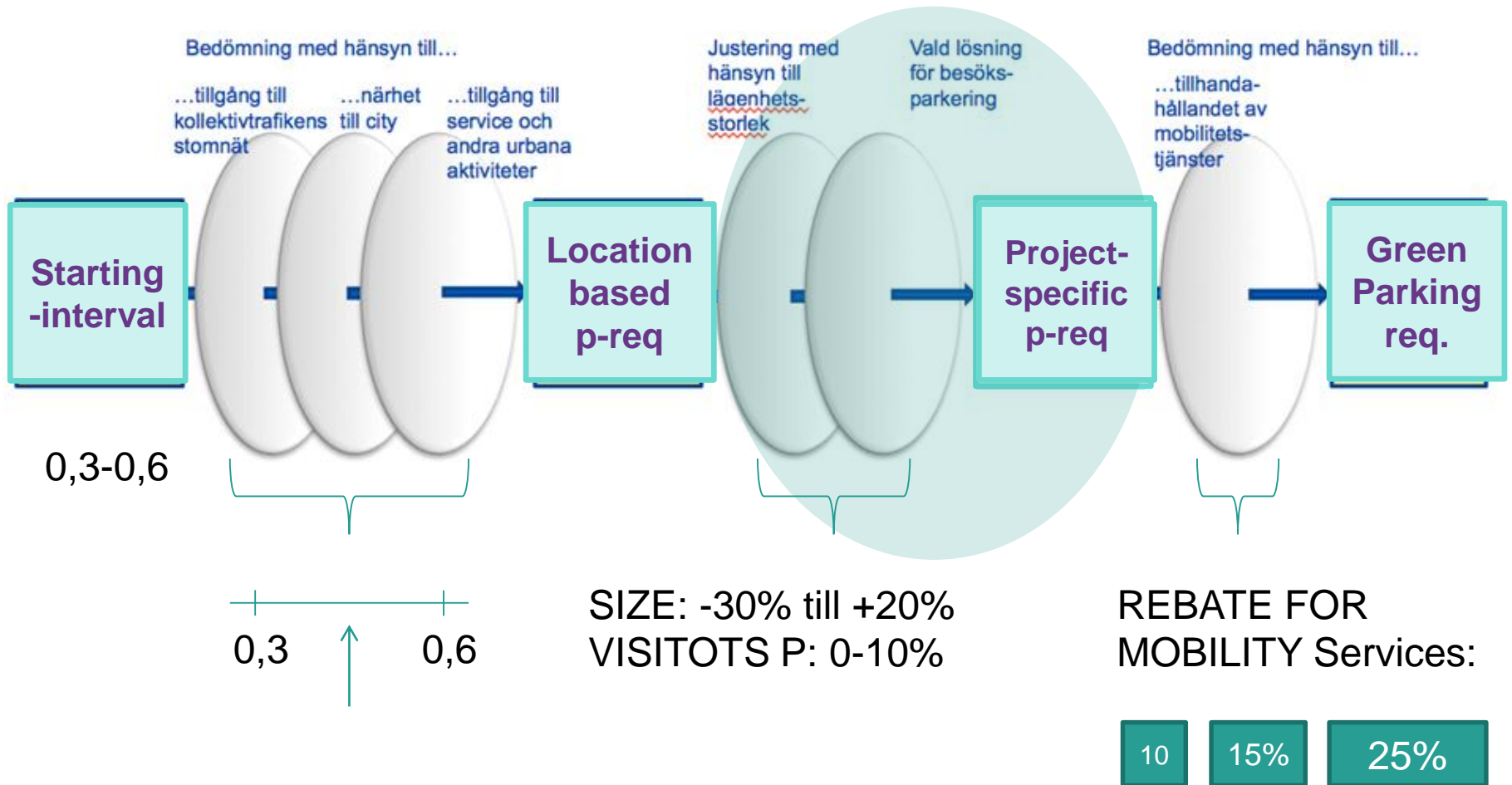
Location
based
p-req

- Where you end up in the interval (0,3-0,6) depends on;
 - Distance to the main PT-lines (commuter trains, subway and main bus routs)
 - Distance to city centre
 - Access to local service and other urban activities
 - Access to free existing parking facilities in garages in the neighbourhood

Political decision: "Short distance to subway should be given a high rebate"

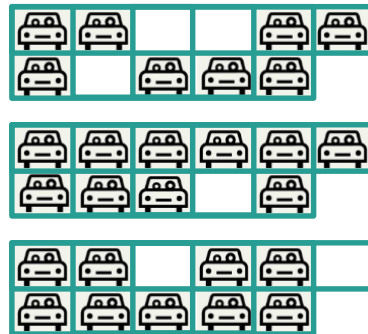
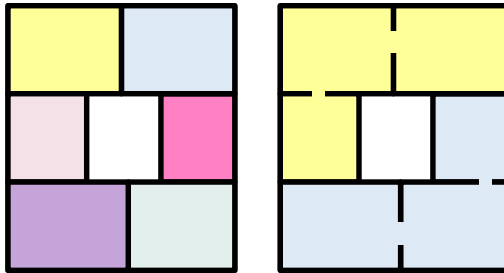
- The above is validated in dialog with the developers. The process becomes clear for all involved.

The dialog process



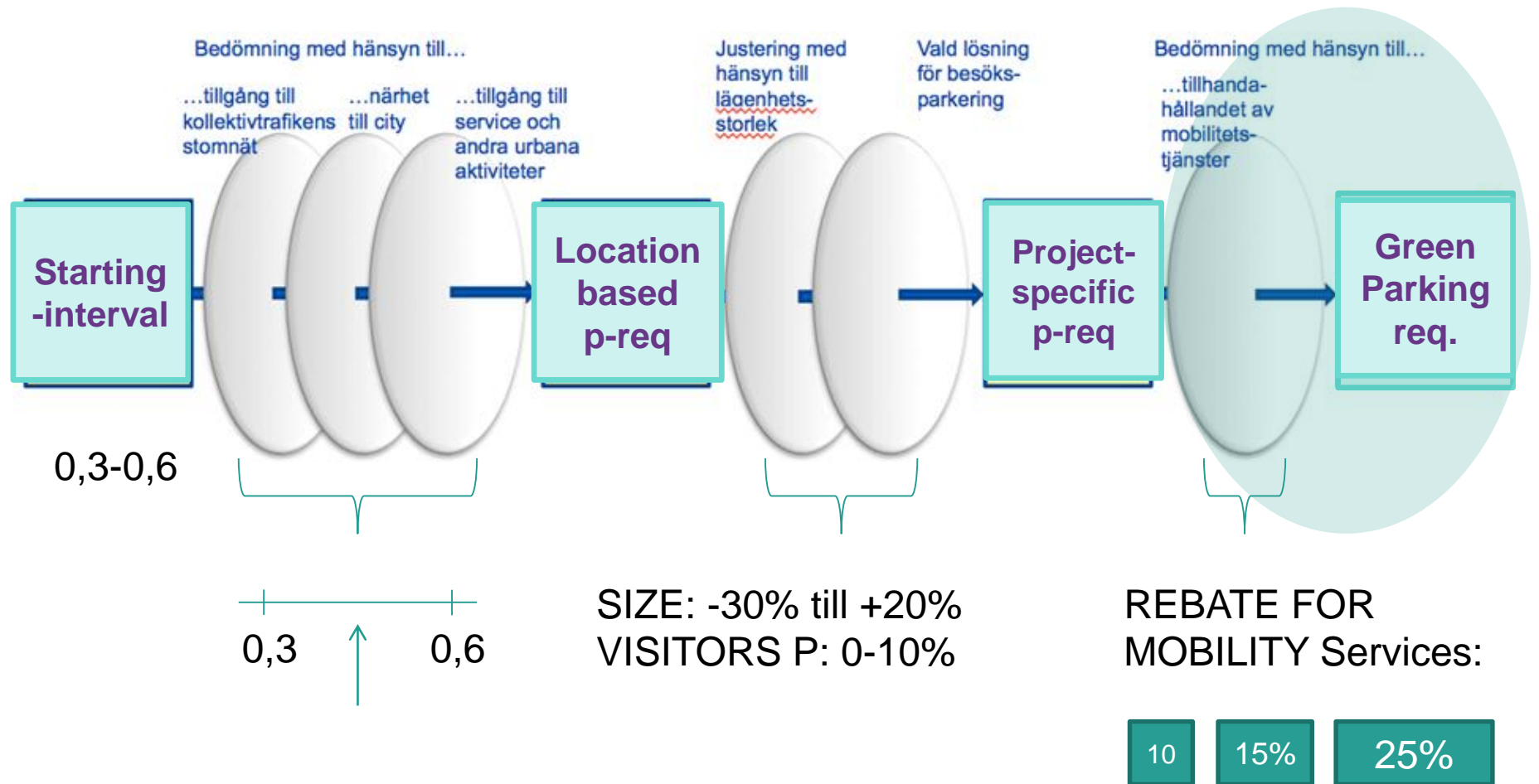
Apartment size and Parking solution

Project-specific
p-req



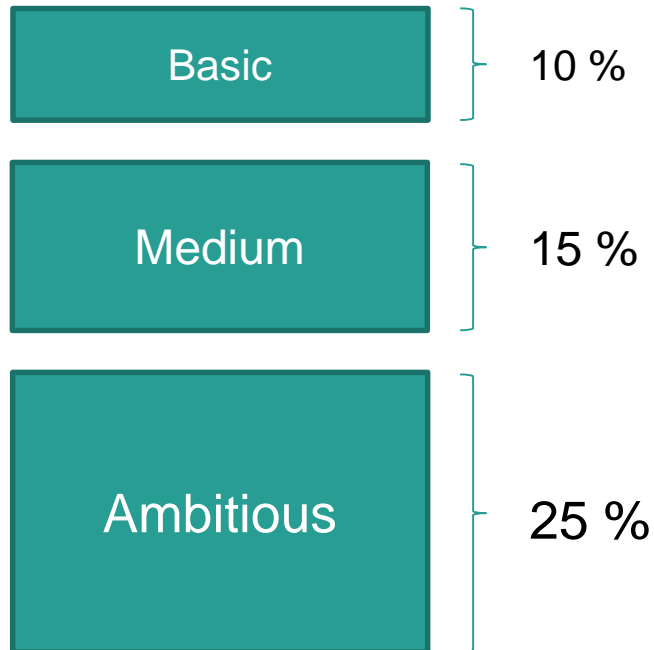
- The size of the apartments will increase /decrease:
 - Small -30%
 - Big +20%
- Visitors parking +10% but can be 0 if free floating parking is used – larger open garages

The dialog process



Mobility services

Green
Parking
req.



- The effects of single solutions are unsure – research is missing
- Solutions that work together and complement each other
- Package of solutions

Mobility services - 10 % rebate

Green
Parking
req.

Basic

} 10 %

Example of solutions/asures:

- Information
- Excellent bicycle parking, easy to access etc
- Improved facilities for bicyclists, automatic doors, e-charging, air...
- Car-sharing available in the area

Mobility Services 15 % rabatt

Green
Parking
req.

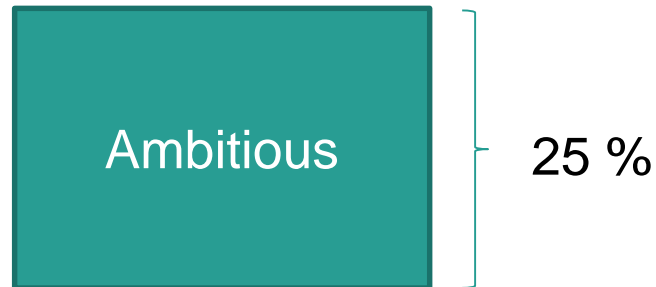


Example of solutions/asures :

- Information
- Excellent bicycle parking, easy to access etc
- Improved facilities for bicyclists
- Car-sharing available in the area
- Bicycle pool
- PT-card for a year

Mobility Services 25 % rabatt

Green
Parking
req.



Example of solutions/asures :

- Information
- Excellent bicycle parking, easy to access etc
- Improved facilities for bicyclists
- Car-sharing available in the area
- Bicycle pool
- PT-card for a year
- Service boxes for deliveries (also refrigerated)
-

