



KARBON FİYATLANDIRMASI VE KREDİ FİYATLAMASI İLİŞKİSİ

**Gelecek için Planlama
10 Temmuz 2024 – Tekfen Tower**

**Hayri Türkmen
TBB İklim Riskleri Çalışma Grubu Başkanı**



İÇ KARBON FİYATLAMASI HANGİ DÜZENLEMELERDE ZORUNLU

Disclosure requirement ESRS E1-8 – Internal Carbon Pricing		
ESRS E1.63(a)	IFRS S2.29(f)	Disclosure of type of carbon pricing scheme.
ESRS E1.63(b)	NA	Detailed disclosure of the scope of application.
ESRS E1.63(c) and AR65	IFRS S2.29(f) IFRS S1.21(b)(ii)	Disclosure of the critical assumption in determination of internal carbon prices. Consistency between internal carbon prices with prices used in the financial statements (see paragraph AR65 of ESRS E1).
ESRS E1.63(d)		Gross Scope 1, Scope 2 and Scope 3 greenhouse gas emission volumes covered by internal carbon pricing schemes and their relative share of the undertaking's total greenhouse gas emissions.

İÇ KARBON FİYATLAMASI HANGİ DÜZENLEMELERDE ZORUNLU

IFRS-TSRS S2

İklimle İlgili Metrikler

- f)İç Karbon Fiyatları- İşletme aşağıdaki bilgileri açıklar
 - i)İşletmenin karar verme sürecinde bir karbon fiyatı uygulayıp uygulamadığına ve ne şekilde uyguladığına dair bir açıklama (Örneğin, yatırım kararları, transfer fiyatlandırması ve senaryo analizi) ve
 - ii)İşletmenin, sera gazı emisyonlarının maliyetlerini değerlemek için her bir metrik ton sera gazı emisyonunun fiyatı,

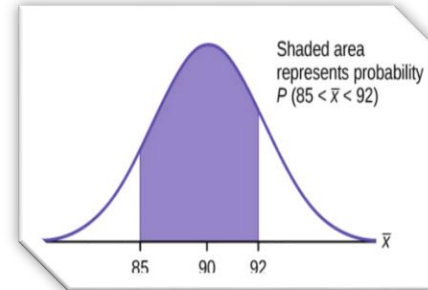
KREDİ FİYATLAMASININ TEMEL BİLEŞENLERİ



Fonlama Maliyeti



Diğer Yönetimsel
Maliyetler

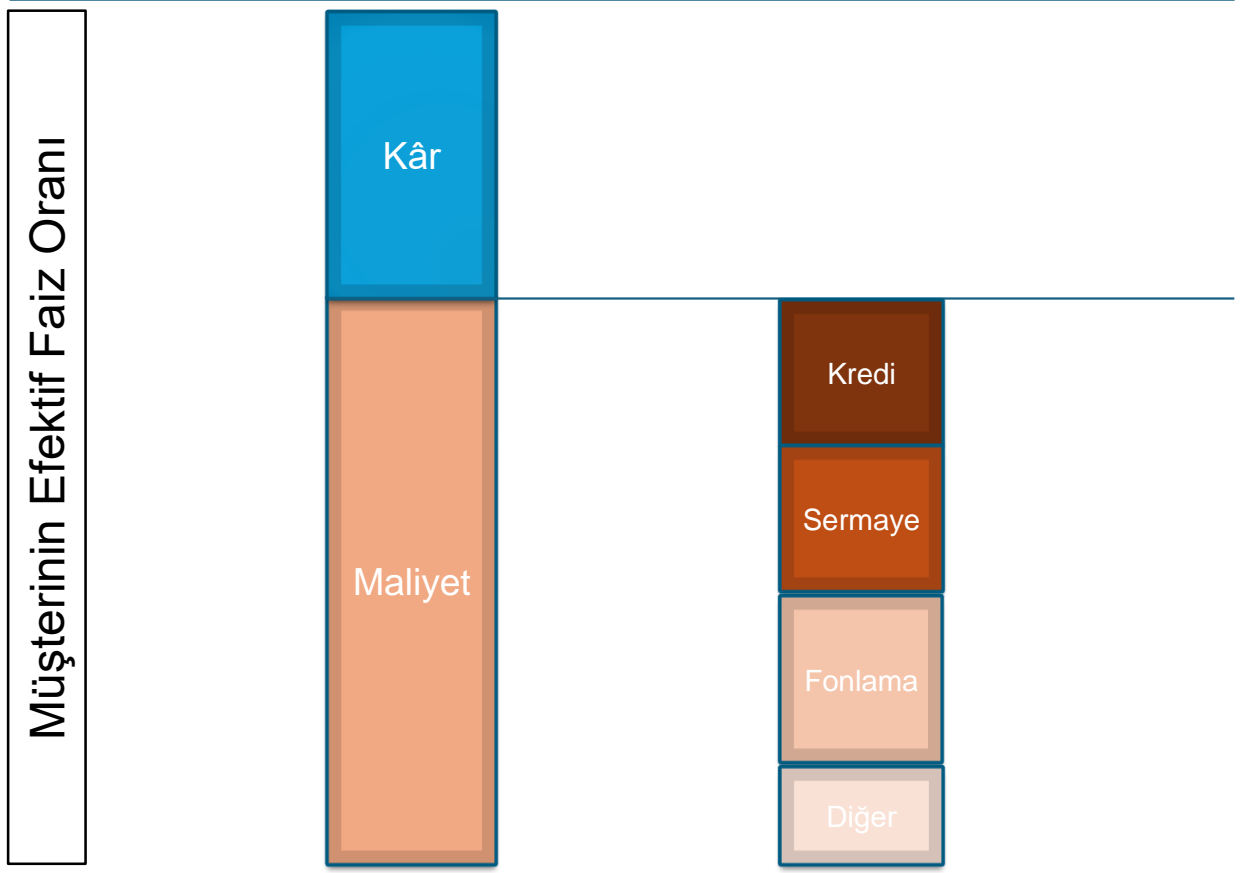


Kredi Riski
Maliyeti



Sermaye
Maliyeti

MEVCUT KREDİ FİYATLAMASI



MEVCUT KREDİ FİYATLAMASI

Tutar : 10 Milyon USD

Vade : 1 Yıl

Teminat:Yok

Karşılık	Sermaye	Fonlama
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%1

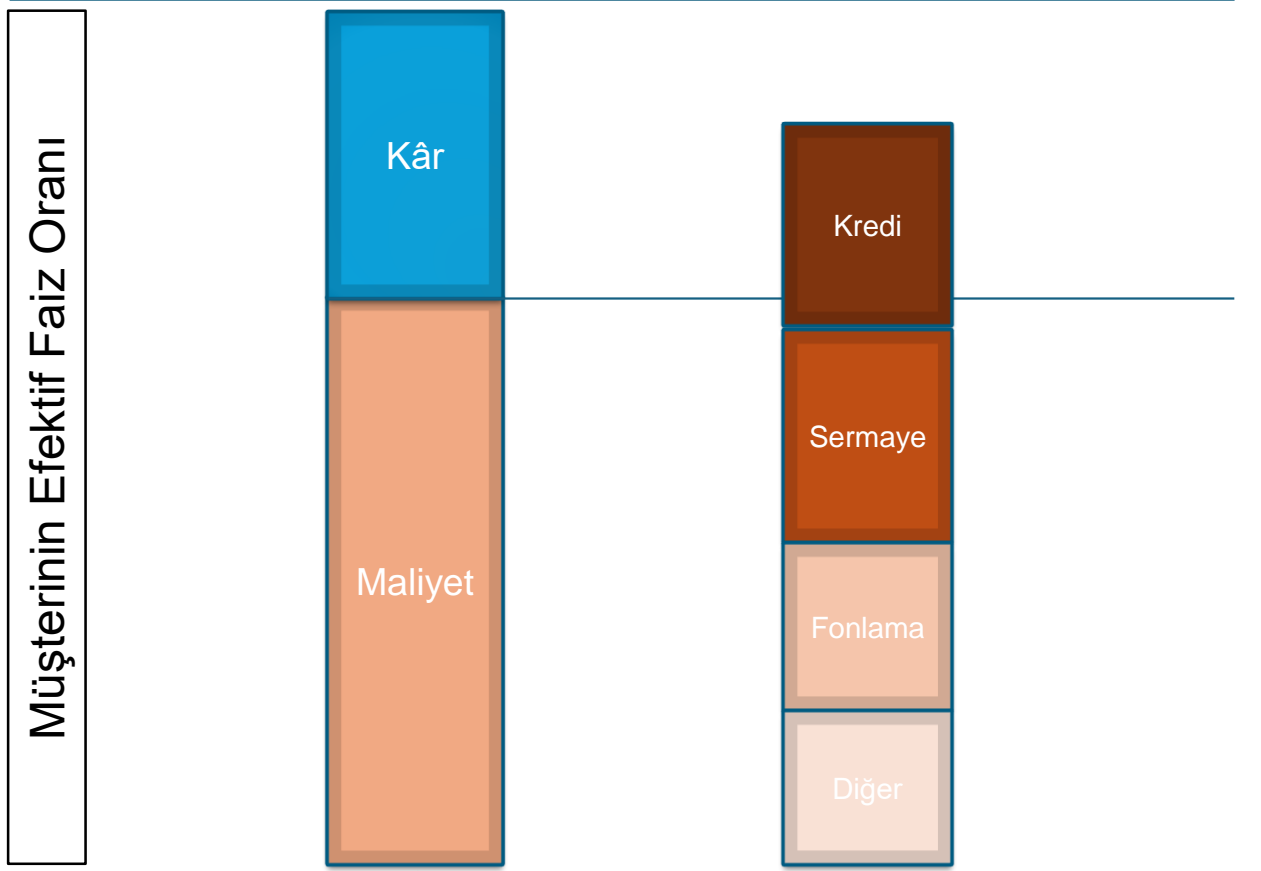
%2

%7,75

Banka Kullandırımı:

SFOR (Secured Overnight Funding Rate) + %8.5 = %5.35 + % 8.5 = **%13.85**

KARBON FİYATLAMASI DAHİL KREDİ FİYATLAMASI



KARBON FİYATLAMASI DAHİL KREDİ FİYATLAMASI

Performans Göstergeleri

Çevresel Performans Göstergeleri

	Birim	2021	2022	2023
Enerji				
Toplam Enerji Tüketimi	-	-	-	-
Elektrik	kWh	812.843.496	693.755.150	399.832.006
Doğalgaz	M ³	37.586.035	42.196.210	50.353.172
Dizel	Lt	100.494.035	9.080.366	4.547.289
Su ve Atık Sular				1.821.678
Kaynağına Göre Toplam Su Tüketimi	M ³	3.183.676	3.774.086	1.821.678
Toplam Su Deşarjı	M ³	4.078.923	2.903.143	X
Emisyonlar²⁵				
Doğrudan Sera Gazı Emisyonları (Kapsam-1)	Ton CO ₂ e	341.977	120.858	213.374
Enerji Dolaylı Sera Gazı Emisyonları (Kapsam-2)	Ton CO ₂ e	358.727	338.714	34.335
Diğer Dolaylı Sera Gazı Emisyonları (Kapsam-3)	Ton CO ₂ e	-	-	188.830
Toplam Kapsam-1 ve Kapsam-2 Emisyonları	Ton CO ₂ e	700.704	459.572	247.709
Toplam Kapsam-1, Kapsam-2 ve Kapsam-3 Emisyonları	Ton CO ₂ e	700.704	459.572	436.539
Atıklar				
Üretilen Toplam Atık Miktarı	Ton	18.865.905	9.993.674	147.954
Kâğıt ve Karton	Ton			473
Plastik	Ton			241
Cam	Ton			8
Tehlikeli Atık	Ton			3.321
Karışık Ambalaj	Ton			4.324
Ahşap	Ton			7
Metal	Ton			712
Çevresel Uyum				
Ödenen Çevre Uyum Cezası Sayısı	Adet	0	0	0
Ödenen Çevre Uyum Cezası Miktarı	TL	0	0	0

Firmanın Toplam Emisyonları
Kapsam 1+ Kapsam 2 +
Kapsam 3
436,539 Ton Co2

KARBON FİYATLAMASI DAHİL KREDİ FİYATLAMASI

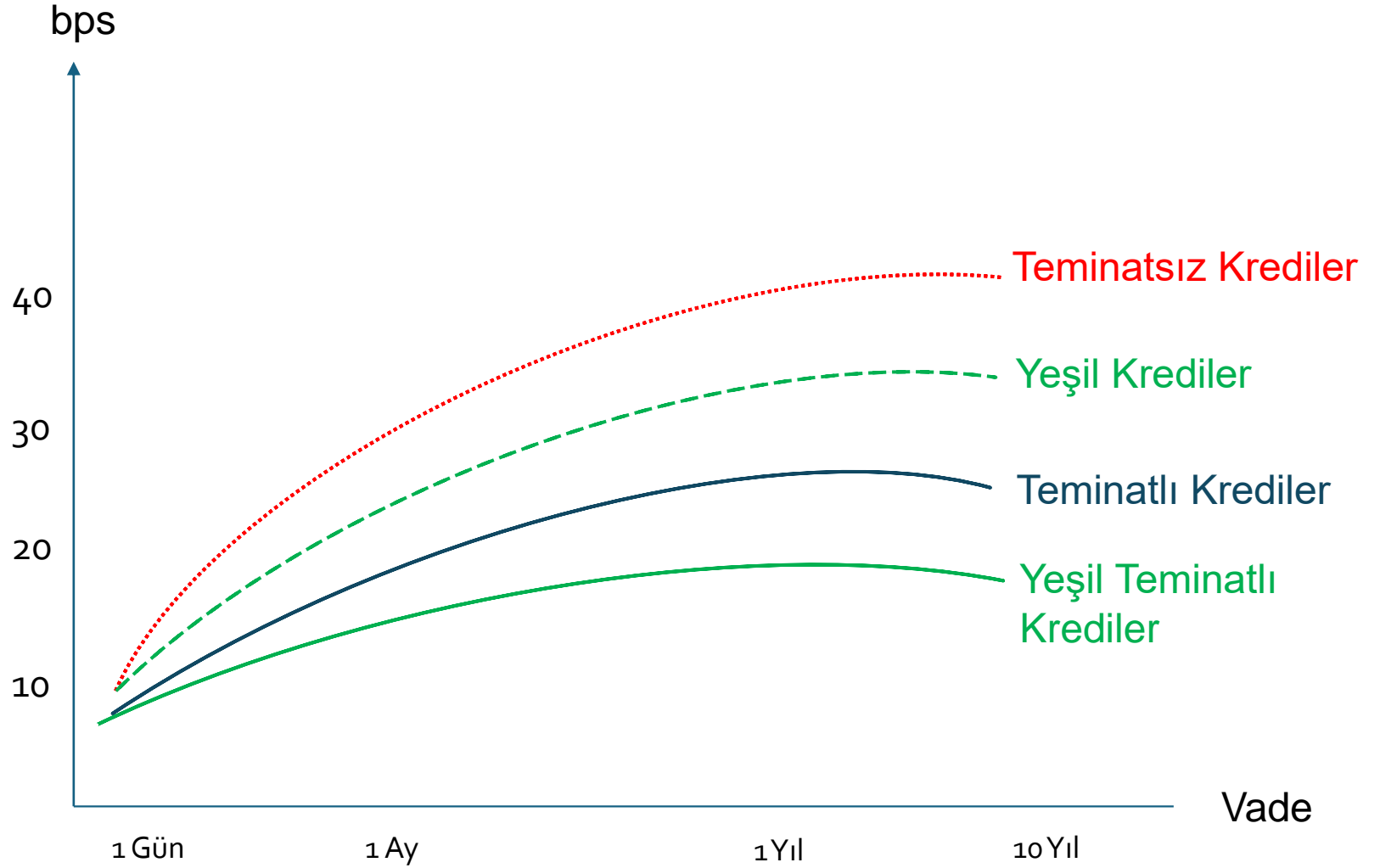
CARBON CREDITS.com			
Live Carbon Prices			
	Last	Change	YTD
Compliance Markets			
European Union	€67.76	+0.76 %	-15.98 %
UK	£45.31	+0.35 %	-0.42 %
California Low Carbon Fuel	\$44.00	-34.86 %	-33.33 %
Australia (AUD)	\$34.25	-	+2.24 %
New Zealand (NZD)	\$51.25	-	-25.89 %
South Korea	\$6.43	-0.22 %	-1.11 %
China	\$12.59	-	+15.10 %
Voluntary Markets			
Aviation Industry Offset	\$0.39	+2.63 %	-33.90 %
Nature Based Offset	\$0.99	-	+8.79 %
Tech Based Offset	\$0.61	-	+3.39 %

Carbon Prices by CarbonCredits.com

[Add this widget to your site](#)

- Firmanın Toplam Öz kaynak + Uzun Vadeli Borçları = 4.6 Milyar USD
- Bankanın Kredi Kaynaklı Payı = 0,22%
- Kapsam 1+2+3 Emisyonu = 436.539 Ton CO2
- Banka Katkısı = Finanse Edilen Emisyon 953 Ton
- 953 Ton CO2 yi Nötrlemek için
- En Düşük 58 USD
- En Yüksek 64. 575 USD

KREDİ SPREADLERİ VE YEŞİL KREDİ SPREADLERİ





BANKING
REGULATION AND
SUPERVISION AGENCY



European Bank
for Reconstruction and Development

Bonus Slide



TÜRK BANKACILIK SEKTÖRÜNDE RİSK BAZLI FİYATLAMA YERİNE KULLANILAN RAROC NEDİR?

Exhibit 1: Traditional vs. economic P&L

Traditional P&L	Economic P&L
Operating revenues	Operating revenues
- Cost of goods sold	- Cost of goods sold
Operating income	Operating income
- Depreciation and amortisation	- Depreciation and amortisation
- Provisions	- Expected loss (EL)
± Non-interest revenue/expense	± Non-interest revenue/expense
- Tax expense	- Tax expense
= Net income	± Significant terms and adjustments
÷ Invested capital	± Funding credit/charge
= ROIC	= Risk-adjusted income
	÷ Risk capital
	= Corporate RAROC

Exhibit 2: Sample corporate RAROC calculations

	BU1	BU2
Profit measure	50	50
Invested capital	500	500
Risk capital	400	600
ROIC (%)	10.0%	10.0%
RAROC (%)	12.5%	8.3%

■ Indicates P&L line items that differ when translating a traditional (accounting) P&L to an economic (corporate RAROC) P&L

İÇ KARBON FİYATLAMASI KULLANMAK NEDEN ÖNEMLİ VE STRATEJİK ETKİLERİ

HOW WILL CARBON BE PRICED?	Only used to evaluate investment opportunities (shadow price)	Applied to emissions (carbon charge)		Used to evaluate investment opportunities (shadow prices) and applied to emissions (carbon charge)
HOW MUCH WILL BE CHARGED?	Adopt country-specific Social Cost of Carbon		Develop firm-specific carbon price reflecting: abatement target, revenue target, & benchmarking target	
HOW OFTEN IS THE CHARGE ASSESSED?	Monthly	Annually		Other
IS THE MONEY RETURNED?	<div>← All ReturnedNot Returned →</div>			
WHAT IS THE RETURN MECHANISM?	Fund	Check	Competition	Other
IS THE MONEY EARMARKED OR UNRESTRICTED?	Earmarked for: energy efficiency investment, offset programs, stewardship initiatives, carbon-neutral spending		Unrestricted	

Figure 1: Internal Carbon-Pricing Policy Framework

İÇ KARBON FİYATLAMASI- ÖRNEK 1

CASE STUDY: YALE UNIVERSITY				
HOW WILL CARBON BE PRICED?	Only used to evaluate investment opportunities (shadow price)	Applied to emissions (carbon charge)	Used to evaluate investment opportunities (shadow prices) and applied to emissions (carbon charge)	
HOW MUCH WILL BE CHARGED?	Adopt country-specific Social Cost of Carbon		Develop firm-specific carbon price reflecting: abatement target, revenue target, & benchmarking target	
HOW OFTEN IS THE CHARGE ASSESSED?	Monthly	Annually	Other	
IS THE MONEY RETURNED?	<div><div></div><div>←</div><div>→</div><div>All Returned</div><div>Not Returned</div></div>			
WHAT IS THE RETURN MECHANISM?	Fund	Check	Competition	Other
IS THE MONEY EARMARKED OR UNRESTRICTED?	Earmarked for: energy efficiency investment, offset programs, stewardship initiatives, carbon-neutral spending		Unrestricted	

İÇ KARBON FİYATLAMASI- ÖRNEK 2

CASE STUDY: MICROSOFT				
HOW WILL CARBON BE PRICED?	Only used to evaluate investment opportunities (shadow price)	Applied to emissions (carbon charge)		Used to evaluate investment opportunities (shadow prices) and applied to emissions (carbon charge)
HOW MUCH WILL BE CHARGED?	Adopt country-specific Social Cost of Carbon		Develop firm-specific carbon price reflecting: abatement target, revenue target, & benchmarking target	
HOW OFTEN IS THE CHARGE ASSESSED?	Monthly	Annually	Other	
IS THE MONEY RETURNED?	<div><div>←</div><div></div><div>→</div><div>All Returned</div><div></div><div>Not Returned</div><div>↓</div></div>			
WHAT IS THE RETURN MECHANISM?	Fund	Check	Competition	Other
IS THE MONEY EARMARKED OR UNRESTRICTED?	Earmarked for: energy efficiency investment, offset programs, stewardship initiatives, carbon-neutral spending		Unrestricted	