

Hello,

Thanks for your interest in my recent post about Power BI SVG gauge charts.
Below you'll find the requested code for your reference.

Note: This code works only if you have two measures: an **Actuals** measure and a **Plan** measure for comparison. Create your measure and set its data category to **Image URL**. Then, use this measure in an **HTML Content (Lite)** visual

Please also note that in **Power BI Desktop**, the legend circles appear slightly misaligned (positioned higher than the legend text), while in **Power BI Service** they are correctly aligned.

CHART 1: SVG Percentage Gauge

```
SVG_PROJECT_PROGRESS =  
  
-- Base data  
VAR _actual = [Project Progress Actual]  
VAR _plan = [Project Progress Plan]  
  
VAR _variation = (_actual - _plan) * 100  
  
-- Data control  
VAR NoActual = IF(_actual = 0 || ISBLANK(_actual), TRUE(), FALSE())  
VAR NoPlan = IF(_plan = 0 || ISBLANK(_plan), TRUE(), FALSE())  
VAR NoData = IF(NoActual && NoPlan, TRUE(), FALSE())  
  
-- Visual parameters  
VAR ActualColor = "#7A8FA7"  
VAR PlanColor = "#B0C7D9"  
VAR LegendPlanColor = "#88AFCF"  
VAR Radius = 140  
VAR CenterX = 270  
VAR CenterY = 260  
VAR StrokeWidth = 16  
  
-- Gauges and Marker  
VAR MaxRef = IF(_actual > 1, _actual, 1)  
VAR TotalArcLength = PI() * Radius  
VAR PlanArcLength = DIVIDE(_plan, MaxRef, 0) * TotalArcLength  
VAR ForegroundArcLength = DIVIDE(_actual, MaxRef, 0) * TotalArcLength  
  
VAR TargetAngle = 180 + DIVIDE(_plan, MaxRef, 0) * 180  
VAR MarkerX1 = CenterX + (Radius + StrokeWidth*1.1) * COS(RADIANS(TargetAngle))  
VAR MarkerY1 = CenterY + (Radius + StrokeWidth*1.1) * SIN(RADIANS(TargetAngle))  
VAR MarkerX2 = CenterX + (Radius - StrokeWidth*1.1) * COS(RADIANS(TargetAngle))  
VAR MarkerY2 = CenterY + (Radius - StrokeWidth*1.1) * SIN(RADIANS(TargetAngle))  
VAR MarkerLine =  
    IF(
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        NoData || NoPlan || NoActual || _actual <= _plan,
        BLANK(),
        "<line x1=''" & MarkerX1 & "' y1=''" & MarkerY1 &
        "' x2=''" & MarkerX2 & "' y2=''" & MarkerY2 &
        "' stroke=''" & PlanColor & "' stroke-width='6'/">"
    )

VAR PlanGauge =
    IF(
        NoData || NoPlan || _actual > _plan,
        BLANK(),
        "<path d='M " & (CenterX - Radius) & "," & CenterY &
        " A " & Radius & "," & Radius & " 0 0,1 " & (CenterX + Radius) & "," & CenterY & "' " &
        "stroke=''" & PlanColor & "' stroke-width=''" & StrokeWidth & "' fill='none' stroke-
linecap='round' " &
        "stroke-dasharray=''" & PlanArcLength & "," & TotalArcLength & "'/>"
    )

VAR ActualGauge =
    IF(
        NoData || NoActual,
        "",
        "<path d='M " & (CenterX - Radius) & "," & CenterY &
        " A " & Radius & "," & Radius & " 0 0,1 " & (CenterX + Radius) & "," & CenterY & "' " &
        "stroke=''" & ActualColor & "' stroke-width=''" & StrokeWidth & "' fill='none' stroke-
linecap='round'
        stroke-dasharray=''" & ForegroundArcLength & "," & TotalArcLength & "'/>"
    )

-- Formats
VAR TextValue = FORMAT(_actual, "0%", "es-ES")
VAR SubTextValue = "of " & FORMAT(_plan, "0%", "es-ES")
VAR VarText = FORMAT(_variation, "#,0", "es-ES")

VAR VarColor =
    SWITCH(
        TRUE(),
        _variation > 0, "#2E9540",
        _variation < 0, "#FA5252",
        "#888888"
    )

VAR VarIcon =
    SWITCH(
        TRUE(),
        _variation > 0, "▲",
        _variation < 0, "▼",
        "▬"
    )

-- Final SVG
VAR _SVG =
"
```

```

<svg width='540' height='350' viewBox='0 0 540 350' fill='none'
xmlns='http://www.w3.org/2000/svg'>
<rect width='540' height='350' rx='8' fill='white' fill-opacity='1' />
<style>
  svg { cursor: default !important; }
  * { cursor: default !important; }
</style>

<!-- Title -->
<text fill='#3C5067' font-family='Century Gothic' font-size='36' font-weight='600'>
  <tspan x='25' y='49'>Project Progress</tspan>
</text>

<!-- Base Gauge -->
<path d='M " & (CenterX - Radius) & "," & CenterY &
" A " & Radius & "," & Radius & " 0 0,1 " & (CenterX + Radius) & "," & CenterY & ""
stroke='#D6D6D6' stroke-width='& StrokeWidth & '' fill='none' stroke-linecap='round' />

<!-- Gauge plan (if actual <= plan, and plan exists) -->
" & PlanGauge & "

<!-- Gauge actual (if actual exists) -->
" & ActualGauge & "

<!-- Marker (if actual > plan and data existss) -->
" & MarkerLine & "

<!-- Main Value -->
<text x='& CenterX & "' y='& (CenterY - 48) & "' text-anchor='middle' alignment-
baseline='middle'
  font-size='60' fill='#000000' font-family='Century Gothic' font-weight='300'>" & TextValue &
</text>

-- Subtext + Variation
<!-- Subtext group -->
<text x='& (CenterX - 50) & "' y='& (CenterY) & "' text-anchor='middle' alignment-
baseline='middle'
  font-family='Century Gothic' fill='#555555'>
  <tspan dx='2' dy='6' font-size='36'>" & SubTextValue & "</tspan>
</text>

<!-- Variation group aligned to the right -->
<text x='& (CenterX + 110) & "' y='& (CenterY + 4) & "' text-anchor='end' alignment-
baseline='middle'
  font-family='Century Gothic' fill='& VarColor & '' font-weight='600'>
  <tspan font-size='26'>" & VarText & "</tspan>
  <tspan dx='1' font-size='28'>" & VarIcon & "</tspan>
</text>

<!-- Bottom Legend -->
<!-- Cum Act Circle-->
<circle cx='& (CenterX - 185) & "' cy='& (CenterY + 35) & "' r='8' fill='& ActualColor &
" />

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<text x=''" & (CenterX - 165) & "' y=''" & (CenterY + 45) & "'>
  text-anchor='start' alignment-baseline='middle'
  font-size='24' fill='#3C5067' font-family='Century Gothic' font-weight='600'>
    Cumulative Actual vs
</text>

<!-- Plan Circle -->
<circle cx=''" & (CenterX + 110) & "' cy=''" & (CenterY + 37) & "' r='8' fill=''" &
LegendPlanColor & "' opacity='0.7' />
<text x=''" & (CenterX + 130) & "' y=''" & (CenterY + 45) & "'>
  text-anchor='start' alignment-baseline='middle'
  font-size='24' fill='#3C5067' font-family='Century Gothic' font-weight='600'>
    Plan
</text>

</svg>
"

```

RETURN
_SVG

CHART 2: SVG Absolute Value Gauge

```

SVG_CASH_POSITION =

-- Base data
VAR _actual = [Cash Position Actual]
VAR _plan   = [Cash Position Plan]
VAR _variation = _actual - _plan

-- Data control
VAR NoActual = _actual = 0 || ISBLANK(_actual)
VAR NoPlan   = _plan   = 0 || ISBLANK(_plan)
VAR NoData   = NoActual && NoPlan

-- Dynamic scale for actual and plan
VAR _absValue = MAX( ABS(_actual), ABS(_plan) )

VAR _scale =
  SWITCH(
    TRUE(),
    _absValue >= 1e6, "M",
    _absValue >= 1e3, "K",
    "$"
  )

VAR _divisor =
  SWITCH(
    _scale,
    "M", 1e6,
    "K", 1e3,
  )

```

```

        1
    )

-- Scale values for text
VAR _actualScaled = DIVIDE(_actual, _divisor)
VAR _planScaled   = DIVIDE(_plan, _divisor)

-- Dynamic subtitle
VAR SubtitleText =
    SWITCH(
        _scale,
        "M", "Values in $M",
        "K", "Values in $K",
        "Values in dollars"
    )

-- Variation scaled independently
VAR _absVar = ABS(_variation)

VAR _varDivisor =
    SWITCH(
        TRUE(),
        _absVar >= 1e6, 1e6,
        _absVar >= 1e3, 1e3,
        1
    )

VAR _varScaled = DIVIDE(_variation, _varDivisor)
VAR VarText = FORMAT(_varScaled, "#,##0", "es-ES")

-- Variation icon
VAR VarColor =
    SWITCH(
        TRUE(),
        _variation > 0, "#2E9540",
        _variation < 0, "#FA5252",
        "#888888"
    )

VAR VarIcon =
    SWITCH(
        TRUE(),
        _variation > 0, "▲",
        _variation < 0, "▼",
        "▬"
    )

-- Final formatting for actual and plan (no decimals)
VAR TextValue = FORMAT(_actualScaled, "#,##0", "es-ES")
VAR SubTextValue = "of " & FORMAT(_planScaled, "#,##0", "es-ES")

-- Colors
VAR ActualColor = "#687F97"

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VAR PlanColor    = "#B0C7D9"
VAR LegendPlanColor = "#88AFCF"

-- Visual parameters
VAR Radius = 140
VAR CenterX = 270
VAR CenterY = 270
VAR YShift = -10
VAR StrokeWidth = 16

-- Gauges and Marker
VAR TotalArcLength = PI() * Radius

VAR PlanArcLength =
    IF(_actual >= _plan,
        DIVIDE(_plan, MAX(_actual, _plan), 0) * TotalArcLength,
        TotalArcLength
    )

VAR ActualArcLength =
    IF(_actual >= _plan,
        DIVIDE(_actual, MAX(_actual, _plan), 0) * TotalArcLength,
        DIVIDE(_actual, _plan, 0) * TotalArcLength
    )

VAR ShowMarker = _actual >= _plan

VAR TargetAngle = 180 + DIVIDE(_plan, MAX(_actual, _plan), 0) * 180
VAR MarkerX1 = CenterX + (Radius + StrokeWidth*1.1) * COS(RADIANS(TargetAngle))
VAR MarkerY1 = (CenterY + YShift) + (Radius + StrokeWidth*1.1) * SIN(RADIANS(TargetAngle))
VAR MarkerX2 = CenterX + (Radius - StrokeWidth*1.1) * COS(RADIANS(TargetAngle))
VAR MarkerY2 = (CenterY + YShift) + (Radius - StrokeWidth*1.1) * SIN(RADIANS(TargetAngle))

VAR MarkerLine =
    IF(NoData || NoPlan || NoActual || NOT ShowMarker,
        BLANK(),
        "<line x1='" & MarkerX1 & "' y1='" & MarkerY1 &
        "' x2='" & MarkerX2 & "' y2='" & MarkerY2 &
        "' stroke='" & PlanColor & "' stroke-width='6'/>"
    )

VAR PlanGauge =
    IF(NoData || NoPlan,
        BLANK(),
        "<path d='M " & (CenterX - Radius) & "," & (CenterY + YShift) &
        " A " & Radius & "," & Radius & " 0 0,1 " & (CenterX + Radius) & "," & (CenterY + YShift)
& " " &
        "stroke='" & PlanColor & "' stroke-width='" & StrokeWidth & "' fill='none' stroke-
linecap='round' " &
        "stroke-dasharray='" & PlanArcLength & "," & TotalArcLength & "'/>"
    )

VAR ActualGauge =

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    IF(NoData || NoActual,
    "",
    "<path d='M " & (CenterX - Radius) & "," & (CenterY + YShift) &
    " A " & Radius & "," & Radius & " 0 0,1 " &
    (CenterX + Radius) & "," & (CenterY + YShift) & ""
    stroke='" & ActualColor & "' stroke-width='" & StrokeWidth &
    "' fill='none' stroke-linecap='round'
    stroke-dasharray=''" & ActualArcLength & "," & TotalArcLength & "'/>"
)

-- Final SVG
VAR _SVG =
"
<svg width='540' height='350' viewBox='0 0 540 350' fill='none'
xmlns='http://www.w3.org/2000/svg'>
<style>
  svg { cursor: default !important; }
  * { cursor: default !important; }
</style>

<rect width='540' height='350' rx='8' fill='white'/>

<!-- Title -->
<text fill='#3C5067' font-family='Century Gothic' font-size='36' font-weight='600'>
  <tspan x='25' y='49'>Cash Position</tspan>
</text>

<!-- Subtitle -->
<text fill='#88919B' font-family='Century Gothic' font-size='24' font-weight='600'>
  <tspan x='25' y='83'>" & SubtitleText & "</tspan>
</text>

<!-- Gauge base -->
<path d='M " & (CenterX - Radius) & "," & (CenterY + YShift) &
    " A " & Radius & "," & Radius & " 0 0,1 " & (CenterX + Radius) & "," & (CenterY + YShift) & ""
    stroke='#D6D6D6' stroke-width='" & StrokeWidth & "' fill='none' stroke-linecap='round'/'>

" & PlanGauge &
" & ActualGauge &
" & MarkerLine &

<!-- Actual value -->
<text x=''" & CenterX & "' y=''" & (CenterY + YShift - 48) & "' text-anchor='middle' alignment-
baseline='middle' font-size='60' fill='#000000' font-family='Century Gothic' font-weight='300'> "
& TextValue & " </text>

-- Subtext (forecast value) + variation
<!-- GSubtext group -->
<text x=''" & (CenterX - 50) & "' y=''" & (CenterY - 12) & "' text-anchor='middle' alignment-
baseline='middle' font-family='Century Gothic' fill='#555555'> <tspan dx='2' dy='6' font-
size='36'>" & SubTextValue & "</tspan> </text>
<!-- Variation group, aligned to the right -->

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<text x=''" & (CenterX + 110) & "' y=''" & (CenterY - 6) & "' text-anchor='end' alignment-
baseline='middle' font-family='Century Gothic' fill=''" & VarColor & "' font-weight='600'> <tspan
font-size='26'>" & VarText & "</tspan> <tspan dx='1' font-size='28'>" & VarIcon & "</tspan>
</text>

<!-- Bottom Legend -->
<!-- Actual Circle -->
<circle cx=''" & (CenterX - 138) & "' cy=''" & (CenterY + 25) & "' r='8' fill=''" & ActualColor & "'/> <text x=''" & (CenterX - 118) & "' y=''" & (CenterY + 34) & "' text-anchor='start' alignment-
baseline='middle' font-size='24' fill='#3C5067' font-family='Century Gothic' font-weight='600'>
Actual vs </text>
<!-- Forecast Circle -->
<circle cx=''" & (CenterX + 22) & "' cy=''" & (CenterY + 27) & "' r='8' fill=''" & LegendPlanColor &
"' opacity='0.7'> <text x=''" & (CenterX + 42) & "' y=''" & (CenterY + 34) & "' text-
anchor='start' alignment-baseline='middle' font-size='24' fill='#3C5067' font-family='Century
Gothic' font-weight='600'> Forecast </text> </svg> "

RETURN
_SVG
```